

CHAPTER III

Coming of the Emergency

By 1939 the nation was beginning to rearm. An increasingly ominous world situation impelled the Army to assume a "position in readiness." Not knowing when, where, or under what circumstances the United States might be called upon to fight, military leaders sought to prepare for any foreseeable eventuality. Efforts were made to enlarge the air and ground forces and to equip them with the latest weapons, to ready industry for war production, to stockpile matériel for the Initial Protective Force, and to strengthen the network of strategic bases.¹ The Expansion Program, as these measures, collectively, came to be known, made necessary the first major military construction effort since the Armistice. Between January 1939 and March 1940, approximately \$175 million became available for building purposes. This money enabled the War Department to strengthen seacoast defenses, modernize arsenals, enlarge dozens of stations, and establish ten new installations—airdromes, depots, and garrison posts. Minuscule in comparison with the mobilization and war efforts that were to follow, the Expansion Program was nevertheless "a real start . . . toward placing the Army on a basis of

preparedness."² It was, moreover, the first real test of the construction system established by the Defense Act of 1920.

The Expansion Program

The program had its origins in the Munich Crisis. News that Britain and France had yielded to Hitler's demands came as something of a shock to people in the United States. The signing of the appeasement pact on 30 September 1938 marked the beginning of a shift in American public opinion. Although isolationism was still prevalent, there was growing sentiment in favor of a strong home defense. Reports from Europe indicated that Prime Minister Chamberlain and Premier Daladier, apprehensive over Germany's resurgent military power, viewed the *Luftwaffe* with particular alarm.³ On 14 October, having sat up late the night before "hearing the European side of things" from his ambassador to France, President Roosevelt announced that the defense picture was due for a "complete restudy." Questioned by reporters, he refused to outline a specific program, revealing only that

¹ Annual Rpt of the CofS, 1939. In *Report of the Secretary of War to the President, 1939* (Washington, 1939).

² Rpt of the ASW for F.Y. 1940. In *Report of Secretary of War to the President, 1940* (Washington, 1940), p. 1.

³ (1) William L. Langer and S. Everett Gleason, *The Challenge to Isolation, 1937-1940* (New York: Harper & Brothers, 1952), pp. 35-38. (2) Watson, *Chief of Staff*, pp. 130-32.

he was considering, among other matters, mass production of airplanes.⁴ Within a week of the President's announcement the War Department was humming with planning activity.

Reporting to Assistant Secretary Johnson's office on 31 October, Lt. Col. Russell L. Maxwell, an expert in air ordnance called to Washington a few days before, was struck by the vastness of Johnson's projects and the broad scope of his authority. The first person Maxwell encountered was Johnson's executive, Colonel Burns, who spoke of a White House meeting on 25 October at which the President had stated that war was on the way. Burns revealed that because Secretary Woodring and Chief of Staff Craig did not share this view, Roosevelt was leaving them out of his councils, relying on Johnson instead. Among those the President was consulting were Maj. Gen. Henry H. Arnold, Chief of the Air Corps, Brig. Gen. George C. Marshall, Craig's new deputy, and representatives of the Navy and the WPA. Roosevelt, it seemed, was concerned almost entirely with planes and plane production.⁵ General Arnold believed the Chief Executive was "thinking largely of how American industrial power might help to supply the air needs of those obvious friends abroad who were now being squeezed to the point of desperation by Germany."⁶ On the afternoon of his arrival, Maxwell attended

a planning session. "The conference," he said, "was discussing such large numbers of airplanes, . . . airplane factories, airplane pilots and mechanics that, fresh as I was from our very conservative headquarters of the GHQ, Air Force, I found it a bit difficult to take it all in." During the next two weeks, conference followed conference as Johnson and his associates endeavored to block out an air expansion program.⁷

General Craig viewed rearmament in a different light. His goal was the balanced military force envisioned in the Defense Act and in the mobilization plans—a well-organized, all-purpose force, capable of quick expansion. To rebuild the Army along these lines would take a great deal more than planes. Men, guns, camps, and munitions plants would also be necessary.⁸ The Chief of Staff emphasized the decisive role of land armies. In 1939, on the eve of his retirement, he reaffirmed his position:

No navy, no air force, can operate except from protected bases. It is only necessary to allow hostile ground troops to advance over their bases and their manufacturing facilities and they cease to exist New devices for war are of critical importance. To be without them invites failure. But we must never lose sight of the fact that we must guarantee their continued production and use. . . . Considered and concentrated attention upon the adequacy and efficiency of ground forces can never be neglected. There lies final success or failure.⁹

Along with Secretary Woodring, Craig stressed the fact that the Army's mission was defensive. Both men saw the need for increased military preparedness as

⁴ *Public Papers and Addresses of Franklin D. Roosevelt*, 1938, pp. 546-48.

⁵ (1) Interv with Maj Gen Russell L. Maxwell, 15 Feb 57; Burns Interv, 24 May 56. (2) Ltr, ASW, ASN, and Dep Admin WPA, to the President, 28 Oct 38. AG 580 (10-19-38) Bulky, Increase of the AC. (3) Watson, *Chief of Staff*, pp. 132-33, 136.

⁶ Henry H. Arnold, *Global Mission* (New York: Harper & Brothers, 1949), p. 173.

⁷ Speech by Col Maxwell to a group of Ord officers (Jan 39). Maxwell's Papers.

⁸ Watson, *Chief of Staff*, pp. 127-28, 130-31, 134-35.

⁹ *Report of the Secretary of War, 1939*, pp. 24-25.

stemming not so much from the international crisis as from recent technological advances which had "so shortened the elements of distance and time" that "our national security was no longer assured by the broad expanses of the Atlantic and the Pacific Oceans."¹⁰

While the early November conferences in the Assistant Secretary's office dealt principally with ways and means of increasing aircraft production, the planners agreed that the objective should be broader. Johnson and Burns, tireless workers in the cause of industrial preparedness, sought means of expanding the country's capacity for making munitions. A great believer in war reserves, General Marshall wished to see that Ordnance was well provided for. Although gratified by the President's interest in air power, General Arnold pointed out that planes alone would not make an air force. Construction figured importantly in the thinking of these men. Plants, warehousing, barracks, schools, airfields, and air depots—all these and more were on the list of needed facilities, a list which continued to grow. Owing largely to Burns' efforts, planning was gradually directed back into regular channels. As framed by the Chief of Staff, the War Department's program included substantial increases not only for the Air Corps but for the other arms and services as well. How much of this plan the President and Congress would adopt was a subject of conjecture.¹¹

On 14 November the first of two momentous meetings took place at the White House. Johnson, Craig, Arnold, Marshall, and Burns were there for the

War Department. The President spoke at length—of German leadership in aircraft production, of America's weak defenses, and of threats to the Western Hemisphere and the need for countering them. The first requirement was for planes, he said. A fleet of 20,000 and a capacity for manufacturing 24,000 annually would be desirable. But because Congress might refuse so large a request, he intended to ask for 10,000 planes and capacity for building 10,000 a year. When the Army's representatives interposed a plea for balance, Roosevelt replied that runways, barracks, and schools would not impress Hitler at all. He asked that the War Department prepare a program based on his expressed desires. The next day Johnson, apparently on his own authority—he was Acting Secretary at the time—directed General Craig to draw up three cost estimates: one for 10,000 planes and seven aircraft factories plus the matériel, services, and installations to support an expanded Air Corps; one for war reserves for the 1,000,000-man Army contemplated under the Protective Mobilization Plan; and one for industrial preparedness. Arnold, whose job it was to determine the cost of expanding the Air Corps, prepared most of the estimates for construction. He did not consult Quartermaster General Gibbins, although Marshall had instructed that this be done. Soon plans were taking shape for spending, over a 2-year period, \$1.3 billion for a balanced air force, \$427 million for war reserves, and \$122 million for industrial preparedness.¹²

¹⁰ *Ibid.*, p. 2. See also pp. 4, 25–26.

¹¹ (1) Maxwell Speech (Jan 39). (2) Watson, *Chief of Staff*, pp. 141f. (3) Johnson Interv, 9 May 56; Burns Interv, 24 May 56; Maxwell Interv, 15 Feb 57.

¹² (1) Rpt (n.d.) by Arnold on Conf at White House, 14 Nov 38. CofS Misc Confs, 1938–42. (2) Watson, *Chief of Staff*, pp. 136–43. (3) Arnold, *Global Mission*, pp. 177–80. (4) Langer and Gleason, *Challenge to Isolation*, p. 38. (5) Maxwell Speech (Jan 39). (6) WPD 3708–28A.

When Roosevelt learned what was happening, he summoned his advisers to a second meeting. He wanted planes, he told them, and they were trying to give him everything but planes. Besides, he said, he was not inclined to ask Congress for more than \$500 million. Before the discussion ended, the President had nevertheless agreed to accept roughly one-quarter of the Army's program. He would call for a total of half a billion dollars: \$200 million for nonair items, \$180 million for planes, and \$120 million for other air requirements. Of this last amount \$62 million would be earmarked for construction.¹³

The War Department was planning more construction than could possibly be had for such a sum. Panama, Alaska, Puerto Rico, the southeastern United States, and New England were each to have a big, new air base. Some forty existing Air Corps stations were slated for expansion. There was talk of four more bombing and gunnery ranges and at least two more air depots. Considerable work would be done on seacoast and antiaircraft defenses, and three new posts would be built in the Canal Zone to house an increase in the Coast Artillery garrison there. The list of proposed industrial projects included the seven aircraft factories and important additions to the Frankford and Springfield Arsenals, Aberdeen Proving Ground, the Signal Corps laboratory at Fort Monmouth, New Jersey, and the aeronautical laboratory at Wright Field, Ohio. How to build so much with so little money was a difficult problem indeed. General Arnold predicted that the Air Corps alone would require \$194 million in construction funds before 30 June 1940.

And this estimate did not include the aircraft plants, which would cost in the neighborhood of \$40 million. The planners did their best to economize, proposing to build as little and as cheaply as possible. When the aircraft industry promised greatly to increase its capacity, they dropped the seven factories. Still, enough money was not in sight. Unless the President would ask for more, much work that the planners believed essential would have to be postponed.¹⁴

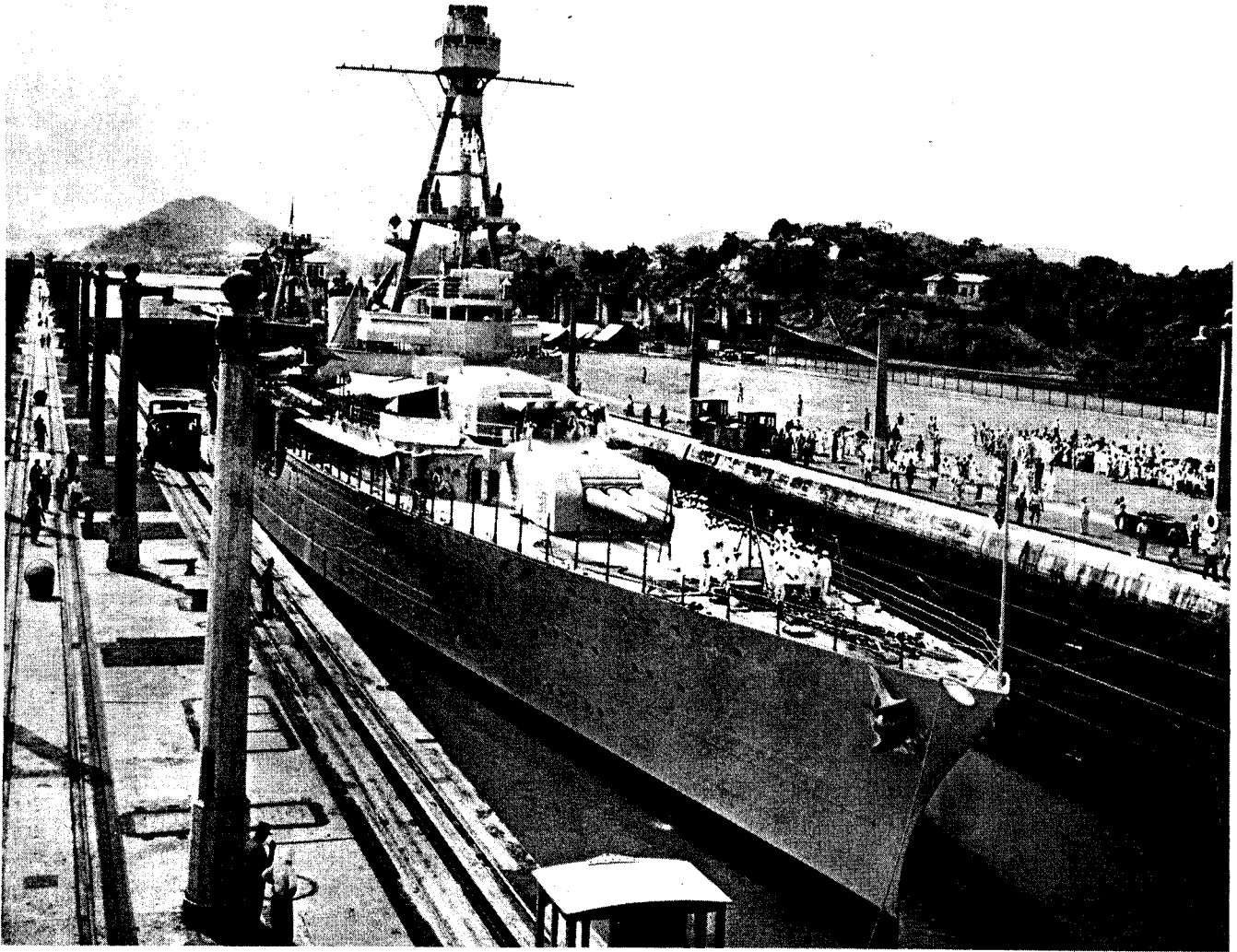
The Quest for Funds

When Congress convened in January 1939, Roosevelt proposed "a minimum program for the necessities of defense."¹⁵ The price was appropriately modest. The regular budget for fiscal year 1940, submitted to Congress on 5 January, contained \$470 million in funds for the War Department plus \$20.7 million in contract authorizations. This request, which was not much larger than the previous year's appropriations, provided almost nothing for expansion. Only \$28.5 million was to go for construction, land, and maintenance. A week later, in a special message to Congress, the President asked for \$525 million for defense—\$450 million for the Army, \$65 million for the Navy, and \$10 million for private schools which would train civilian pilots. The Army's share would be apportioned as follows: \$300 million for the Air Corps; \$110 million for critical items of equipment for the 400,000 men of the Initial Protective Force; \$32 million for educational orders; and \$8 million for sea-

¹⁴ (1) Memo, Arnold for Craig, 28 Nov 38. WPD 3807-28A. (2) Memo, Johnson for the President, 28 Dec 38. (3) Memo, G-4 for TQMG, 20 Feb 39. Last two in G-4/31265 Sec 1.

¹⁵ *Public Papers and Addresses of Franklin D. Roosevelt*, 1939, p. 73.

¹³ *Ibid.*



USS HOUSTON SOUTHBOUND THROUGH MIRAFLORES LOCKS, PANAMA CANAL

coast defenses in the United States, the Canal Zone, and Hawaii, and for a transisthmian highway in Panama. In addition to his big request, the President made another smaller one for \$27 million to strengthen the Panama garrison. He recommended that \$5 million of this amount be granted at once so that construction of housing could begin.¹⁶ Although he stressed the need for an adequate defense, the sums he asked for

were, from the War Department's standpoint, far from sufficient.

Congress lost little time in taking up the President's proposals. On 17 January the Military Affairs Committees of both houses began hearings on his rearmament plans. Appearing that same day before both these groups, Secretary Woodring set forth the views of the War Department. Regardless of world conditions, he declared, the defenses of the United States must be modernized and strengthened. Of first importance were plans for the Panama Canal, "the key-point of our whole protective system."

¹⁶ (1) *Ibid.*, pp. 36ff., 70-74. (2) H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Military Establishment Appropriation Bill for 1940*, pp. 4, 226, 257-70, 497.

The Canal Zone must have more airfields, more planes, and better seacoast and antiaircraft defenses. To protect the eastern approaches, an air base must be built in Puerto Rico. Although Alaska was of less strategic value, it was essential that an airdrome be constructed there. "We must be ready," Woodring explained, "to guard northwestern America against the establishment of hostile air bases." After commenting on the need for educational orders and war reserves, he took up the proposal for an expanded air force. The amount asked by the President would provide 3,000 additional planes and make possible the organization of new squadrons for the United States and outlying possessions. It would also provide "personnel, materiel, a portion of the bombs, and some of the bases and shelter construction necessary for the operation of an increased Air Corps." Regarding the program as a whole, Woodring said, "I consider . . . [it] exceedingly modest, and I feel that its soundness can be sustained under the most searching examination. That program has the wholehearted support of the Army's staff, which has intensively studied the matter and has worked out the detailed plans involved." Pointedly, he added, "I do not mean that the officers concerned find included in the program all that they think necessary."¹⁷

Following Woodring to the stand, General Craig told the House committee, "Our most difficult problem has been to arrive at a satisfactory decision with reference to the construction program." Of the \$62 million requested for Air

Corps construction, he explained, nearly \$23 million was set aside for projects in the Canal Zone. Another \$4 million was for the Alaskan air base. The remainder would have to cover the jobs in the United States, Puerto Rico, and Hawaii. When his turn came to testify, General Arnold outlined a scheme for making the money go around. He meant to hold to a minimum the number of shops, hangars, and warehouses, dispense with concrete runways except in Alaska and the tropics, and provide officers quarters only where no accommodations could be had in nearby towns. He expected to save on housing for enlisted men. In the extreme climates of Panama and Alaska, barracks had to be sturdy, but elsewhere he planned to erect cheap prefabricated structures. "In any event," Arnold assured the congressmen, "we feel that construction will not present a very difficult problem." The Quartermaster General appeared less sanguine. Asked what troubles he foresaw in carrying out his part of the program, General Gibbins replied, "I do not think we would have any difficulty with any of those problems, the problems of procurement, except for construction."¹⁸

As the bill to authorize the President's program moved toward passage, the War Department endeavored to secure additional building funds. Looking about for any available cash that might help get construction started, Colonel Maxwell uncovered \$4.5 million in unused work relief money, which he was able to obtain for expanding the Wright Field Laboratory and purchasing land. At the Congressional hearings several

¹⁷ H Comm on Mil Affs, 76th Cong, 1st sess, *Hearings, An Adequate National Defense as Outlined by the Message of the President of the United States*, pp. 1-3.

¹⁸ H Comm on Mil Affs, 76th Cong, 1st sess, *Hearings, An Adequate National Defense* . . . , pp. 5-6, 12-13, 23, 78.

witnesses testified that an adequate defense would cost much more than Roosevelt had seen fit to ask. But these indirect appeals to Congress for bigger appropriations were unsuccessful. General Craig approached the Bureau of the Budget. On 16 March he put in a supplemental estimate for \$122.5 million for construction. The Budget turned him down. The authorization act, approved on 3 April, sanctioned the program recommended by the President but stipulated that the appropriations, which had yet to be made, not exceed the sums asked in January.¹⁹ Chances of getting more money from Congress seemed practically nil. Maxwell's lucky find was not likely to be duplicated. There remained one last resort—the funds of the WPA.

WPA had entered the picture early. At the time of the Munich Crisis, the President had sent Harry Hopkins to survey the West Coast aviation industry and explore the possibilities of expanding it. Hopkins returned with a plan for employing WPA to build more aircraft factories.²⁰ Meanwhile, Maj. Arthur R. Wilson, the War Department's liaison officer with WPA, had informed the General Staff that Hopkins believed "the Army and Navy are sitting pretty to get a lot of money in the next relief bill for the national defense *if* they can

sell the idea to the President."²¹ During October Hopkins and his assistants persuaded Johnson, Arnold, and Marshall that WPA could be of help in the rearmament program. The idea appealed to the President. At the White House conference of 14 November, he announced his intention of turning over to Hopkins the aircraft plant projects, the only construction he then contemplated. As the construction program grew, WPA funds assumed larger importance in the plans of Johnson and his group. While Hopkins was eager to participate, he naturally wished to do so on his own terms. He had long disliked the arrangement whereby WPA transferred money to other federal agencies, preferring to have relief work directed by his own organization.²² Late in November word reached The Quartermaster General that WPA was preparing to superintend a part of the Army's construction program.

The men responsible for military construction took a dim view of this development. General Gibbins pointed out that the Quartermaster Corps had "an experienced and thoroughly competent organization." While offering to cooperate "with whatever agency may be directed to conduct this work," he questioned the wisdom of entrusting high-speed projects to WPA. The Assistant Chief of Staff, G-4, Brig. Gen. George P. Tyner, was more outspoken. Stating that he was "unable to comprehend . . . how the WPA could

¹⁹ (1) Memo, Johnson for the President, 14 Feb 39. AG 600.12 IR (5-13-39). (2) Maxwell Interv, 15 Feb 57. (3) H Comm on Mil Affs, 76th Cong, 1st sess, *Hearings, An Adequate National Defense* . . . , pp. 4-8, 46, 73. (4) S Comm on Mil Affs, 76th Cong, 1st sess, *Hearings on H R 3791*, pp. 34, 295-98. (5) Ltr, BOB to SW, 12 Apr 39. G-4/30552-21. (6) 53 Stat. 555.

²⁰ (1) Robert E. Sherwood, *Roosevelt and Hopkins, An Intimate History* (New York: Harper & Brothers, 1948), pp. 99-101. (2) Arnold, *Global Mission*, pp. 171-72, 177-78.

²¹ Ltr, Wilson to WD. Quoted in Sherwood, *Roosevelt and Hopkins*, p. 100.

²² (1) Watson, *Chief of Staff*, pp. 137-38. (2) Arthur W. MacMahon *et al.*, *The Administration of Federal Work Relief* (Chicago: Social Science Research Council on Public Administration, 1941), pp. 134, 329-30.

handle this job," he reminded General Marshall: "It is an accepted fact that the WPA is inefficient and uneconomical on construction projects." Since much of the work would be in thinly settled areas, Tyner failed to see how WPA could even man the jobs, much less complete them on time.²³

Despite the conspicuous lack of enthusiasm on the part of Tyner and Gibbins, pressure for using relief funds continued to grow. Disappointed in the President's request to Congress, Johnson and Arnold looked increasingly to WPA for a way out of their budgetary difficulties. On 18 January Arnold informed Craig that if adequate storage and maintenance facilities were to be ready when planes began rolling off the assembly lines, \$20 million was necessary at once for enlarging two air depots and building two new ones. As no appropriation had been asked for depots, Arnold urged that negotiations be started with WPA immediately. A few days later he added a third new depot, bringing to \$28 million the sum required from the relief agency. Johnson was meanwhile seeking \$3,750,000 in WPA money for Ordnance and Signal Corps projects. By late January the estimated cost of the War Department's building program, exclusive of fortifications and posts for the Panama garrison, had risen to \$93,750,000. Johnson now revealed his intention of allotting only \$32 million of the big Air Corps appropriation to construction and of using this money as the sponsor's contribution toward work to be done by WPA. The bulk of defense construction would thus go to the relief agency.

²³ (1) Memo, Gibbins for Marshall, 1 Dec 38. G-4/31265 Sec 1. (2) Memo, Tyner for Marshall, 16 Jan 39. G-4/30552-4.

General Tyner was taken aback. Col. Francis C. Harrington, an Engineer officer of 30 years' service, had recently succeeded Hopkins as WPA Administrator. Tyner could not believe that Harrington approved of Johnson's scheme. He therefore proposed that the War Department and WPA get together and work out a more practicable plan.²⁴

The powwow took place on 25 January. Among those present were Maj. Bartley M. Harloe, Harrington's principal assistant, Lt. Col. Paul W. Baade, chief of the Construction Section, G-4, and Colonel Maxwell. Speaking for General Tyner, Baade attempted to show that Johnson's plan was unworkable. Construction in Panama, Alaska, and Puerto Rico would cost at least \$34.3 million, and there was no WPA in those territories. Some \$7 million would be necessary to equip depots and other installations in the United States and Hawaii; yet WPA could buy no equipment with its funds. Moreover, the relief agency could spend only piddling sums for materials—a mere \$7 per man per month for common labor and even less for skilled. Colonel Maxwell interrupted Baade to disclose that the President had, in confidential reserve, \$25 million that could be used for purchasing. Maxwell suggested that this fund, together with the sponsor's contribution and \$25 million from WPA, would see the program through. Baade disagreed. Alluding to the high cost and slow progress of most WPA construc-

²⁴ (1) Ltrs, Arnold to Craig, 18 Jan, 23 Jan 39. G-4/31265 Sec 1. (2) Memo, Tyner for Craig, 26 Jan 39. OCS 20808-159. (3) Memo, Harrington for Hopkins, 30 Nov 38. (4) Memo, ExecO G-4 for P & E Br G-4, 20 Jan 39. Last two in AG 580 (10-19-38) Bulky, Increase of the AC.

tion, he questioned whether the work could be completed with the funds and in the time available. Furthermore, he argued, Panama, Alaska, and Puerto Rico had still to be provided for. Turning over military funds to WPA was, in his opinion, highly unwise if not illegal. Baade's objections were brushed aside. Maxwell and Harloe agreed to work out a plan which Harrington could lay before the President.²⁵

The plan submitted to Harrington early in February 1939 was ill-contrived and tentative. Unable to find a way of handling the jobs in Panama, Puerto Rico, and Alaska through WPA, Maxwell and Harloe made no provision for them; nor did they refer to a sponsor's contribution. In substance their proposal was that WPA do the construction in the continental United States and Hawaii, using \$25 million of its own money and the President's confidential reserve. But whether Roosevelt would release his funds they did not know. Two months went by and nothing happened. Meanwhile, WPA had run short of money and the President had spent his reserve funds for unemployment relief. By late March little time remained. The House and Senate conferees had reached agreement on the authorization act, and the way would soon be open for introducing an appropriation bill. On 25 March Harrington proposed a solution. Leaving the Canal Zone, Puerto Rico, and Alaska to the Army, he recommended that WPA and the War Department each contribute \$25 million toward the projects in the States and Hawaii, which local WPA administrators would build.

Johnson promptly sent this proposal to the White House.²⁶

There was some question whether WPA would be in a position to undertake any of the Army's jobs, for the relief agency was in trouble with Congress. During the recent election, charges of improper political activity had been made against it. Conservatives of both parties, never friendly toward WPA, had been further antagonized. The intended victims of the President's attempted congressional purge were particularly hostile. Roosevelt's request on 5 January 1939 for \$875 million to see WPA through to the end of the fiscal year had aroused determined opposition. The House slashed \$150 million from the President's estimate and the Senate refused to restore the cut. The supplemental appropriation, approved on 4 February, carried a provision which, for the first time, prohibited WPA from competing with private manufacturers. On 27 March the House passed a resolution to investigate WPA's activities.²⁷ The Associated General Contractors had meanwhile renewed their pledge to "fight for the preservation of private industry in construction, the enlightenment of the public, and the retarding and ultimate dissolution of the Works

²⁵ Memo, Baade for Rcd, 25 Jan 39, and related correspondence in G-4/31265 Sec 1.

²⁶ (1) Draft of Memo for the President, prepared by Maxwell and Harloe, 28 Feb 39, and Incl. SW Secret Files, 591-701. (2) Memo, Harloe for Maxwell, 27 Jan 39. (3) Ltr, Harrington to SW, 25 Mar 39. Last two in G-4/31265 Sec 1. (4) Memo, Johnson for the President, 29 Mar 39. SW Files, Constr Work 1-250.

²⁷ (1) MacMahon, *Federal Work Relief*, pp. 282ff. (2) Sherwood, *Roosevelt and Hopkins*, pp. 98, 104. (3) Donald S. Howard, *The WPA and Federal Relief Policy* (New York: Russell Sage Foundation, 1943), pp. 116-17, 133, 576. (4) H Res 130, 76th Cong, 1st sess, 27 Mar 39.

Progress Administration.”²⁸ Neither Congress nor the contractors seemed likely to accept a plan for putting large-scale military construction projects under WPA.

Assistant Secretary Johnson faced a tough decision. At most, only \$87 million was in prospect for emergency construction, and \$25 million of that was WPA money, worth no more than fifty cents on the dollar in terms of finished work. If the program were designed to fit these funds, few plant or depot projects could be included. On the other hand, if all the jobs were started, chances were that the money would run out before many of them reached completion. Johnson chose the bolder course. On 29 March he advised the President that, while \$87 million would “initiate the main features of the program on a minimum basis, additional funds may be required.”²⁹ In Woodring’s absence, Johnson, as Acting Secretary, ordered affairs in the War Department to suit his purpose. For some days G-4 had been developing a construction program that could be accomplished for \$62 million. Each project had received a priority. Installations in Panama were first on the list, followed, in order, by bases in Puerto Rico and Alaska and the more urgent jobs in the United States and Hawaii. Should funds be forthcoming from WPA, G-4 planned to use them for General Arnold’s depots and additional buildings at the Wright Field laboratory. No provision had been

made for new Ordnance and Signal installations. On orders from Johnson, G-4 wiped out the priorities and revised the list to include all the projects. Still hoping that WPA would come through with more funds than Harrington had so far offered, Johnson insisted that Congress be asked to vote the \$62 million as a lump sum which could be used for any or all projects on the revised list. How this appropriation would be spent would be decided later, after WPA received its money for the new fiscal year.³⁰

Johnson’s decision stirred up protests. General Arnold stated his unalterable opposition to including items that had nothing to do with the Air Corps in the Air Expansion Program. General Tyner contended that industrial projects, though urgently required, “should not be constructed at the expense of much needed Air Corps items.”³¹ Several officers pointed out that The Quartermaster General would not be able to make detailed plans “primarily for the reason that the money provided was insufficient for the construction involved.”³² Learning that the War Department was proceeding “on the assumption” that it would be able to employ large amounts of relief money for emergency construction, several congressmen suggested that the assumption might turn out to be mistaken.³³ But it was futile to argue.

³⁰ (1) Memo, Tyner for Craig, 27 Mar 39. (2) Memo, Johnson for Craig, 29 Mar 39. Both in G-4/31265 Sec 1. (3) Memo, OCAC for Rcd, 5 Apr 39. AAF Central Files, 600.1-600.12H to 30 Jan '39.

³¹ Memo, Tyner for Craig, 27 Mar 39.

³² Notes of Conf in G-4, 4 Apr 39. G-4/31265 Sec 1.

³³ H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*, pp. 24, 43-44.

²⁸ Ltr, E. J. Harding, Managing Dir AGC, to Sen James F. Byrnes, 11 Mar 39. In S Sp Comm to Investigate Unemployment and Relief, 76th Cong, 1st sess, *Hearings on S 1265*, p. 307.

²⁹ Memo, Johnson for the President, 29 Mar 39. SW Files Constr Work, 1-250.

Johnson had his way. The supplemental estimate submitted to Congress late in April requested a lump sum of \$62 million for construction.

Some construction money was becoming available, though not much. On 26 April the President signed the regular military appropriation bill, which carried \$25.5 million for construction, maintenance, and land at permanent posts and \$2.7 million for Engineer work on fortifications. A week later he approved a deficiency appropriation giving the Construction Division \$800,000, most of it to repair damage done by the New England hurricane of 1938, and providing \$2 million for the erection of sea-coast defenses. Hearings on the big emergency appropriation bill did not begin until 16 May.³⁴ Uncertainty as to what emergency projects would be built and how they would be financed promised to continue for some time.

Questions of Responsibility

Where responsibility for emergency construction would lie was an open question. So long as the volume of new construction remained small, the compromise of 1920 endured. There was dissatisfaction, to be sure. There were complaints that Quartermaster methods were too slow and Quartermaster organization was too centralized. But there was no concerted effort to bring about a change. No sooner had expansion begun than moves were afoot to wrest responsibility from The Quartermaster General. Local commanders, intent on strengthening defenses as fast as possible, sought to do construction work

themselves without reference to Washington. The Air Corps, displaying strong separatist tendencies, entered a bid for more authority in construction matters. Proponents of transferring construction to the Corps of Engineers felt the time had come to act. For the Construction Division, these threats were far graver than the one posed by WPA. Turning over part of the expansion program to the relief agency would be no more than a temporary expedient designed to stretch appropriations, but any shift of responsibility within the Army was likely to be permanent.

Among the first to challenge the existing order were the commanding generals of the Panama Canal and Hawaiian Departments. Normally, commanders of the overseas departments had little to do with the Construction Division. A 1929 War Department order permitted them to choose locations, prepare layouts, and draw plans and specifications for most new structures within their commands. Construction was carried out by department quartermasters under the commanding generals rather than by Constructing Quartermasters responsible to The Quartermaster General. Nevertheless, department commanders came under the regulations which stated that all projects involving new construction or major alterations must have prior approval of the Secretary of War and that The Quartermaster General would award construction contracts unless otherwise directed. The Secretary sometimes asked the Construction Division to plan large or unusual overseas projects.³⁵ During the

³⁴ (1) 53 Stat. 592. (2) 53 Stat. 626. (3) H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*.

³⁵ (1) WD Ltr AG 620 (12-9-29) Misc Div (D) to CG's Panama Canal and Hawaiian Depts, 11 Dec 29. WPD 1379-18 to 45. (2) Memo, Tyner for Marshall, 16 Jan 39. G-4/30552. (3) AR 30-1435, 28 Nov 33. (4) Bruner, Outline of Authorizations—Constr Contracts, p. 1. EHD Files.



3,200-MAN BARRACKS BURNING AFTER JAPANESE ATTACK, *Hickam Field, Hawaii*, 7 December 1941.

latter half of 1938 Maj. Gen. David L. Stone, the commander in Panama, clashed with the division over designs for runways at Albrook Field, and Maj. Gen. Charles D. Herron, who commanded in Hawaii, arguing in favor of a dispersed layout, opposed the division's plans for a 3,200-man barracks at Hickam Field. Protracted disagreements delayed the start of construction on these projects, both of which the Air Corps considered urgent.³⁶

In order to restrain the commanders,

³⁶ (1) QM 600.1 (Hickam Fld) II. (2) QM 600.92 (Hickam Fld) 1935-40. (3) QM 611 (Albrook Fld) 1938-40. (4) G-4/29980-6.

General Arnold attempted to tighten his control over Air Corps construction in Panama and Hawaii. At the first sign of trouble with the Albrook job, he urged that the overseas departments turn design responsibility back to the War Department. A few months later, when General Herron tried to prevent the building of the 3,200-man barracks, Arnold broadened his demands. This time he recommended that all questions concerning both the construction and design of Air Corps stations overseas be decided jointly by him and Gibbins and that any disagreements between them be referred to the General Staff.

"The adoption of such a policy," he wrote, "would parallel that now existing for Air Corps stations in the continental limits—a policy which has resulted in a smooth and very satisfactory development of Air Corps construction."³⁷

While Colonel Hartman favored Arnold's plan, he wished to go still further. He proposed that responsibility for all construction, ground as well as air, be centered in Washington. Whether a change would be made was largely up to General Tyner, who viewed the existing arrangement with concern. Arnold and Hartman had little difficulty in persuading him to go along with them. On 18 February 1939 Tyner recommended rescission of the 1929 order. General Craig agreed. A new directive went to the department commanders on 25 February. Henceforth, the War Department would pick sites and make layouts for all military projects in the Canal Zone and Hawaii, and although plans and specifications might still be prepared locally, they could not be used until Washington approved them.³⁸ The advocates of centralized control appeared to have won a signal victory.

So sharp a reversal of policy did not go unchallenged. Hartman soon had to defend the principle of centralized control. In a 12-page memorandum prepared for Tyner's signature, he dealt with the objections against centraliza-

tion. Some persons argued that centralized design meant poor design. That, said Hartman, was untrue; he pointed to the many prizes and commendations won by supervising architect Leisenring and his staff. Some maintained that centralization resulted in the same type of housing everywhere. Hartman called attention to the Spanish-style quarters in Texas, the Provincial French in Louisiana, and the Colonial in Maryland and Virginia. Some asserted that the Air Corps built for itself better quarters than the Quartermaster provided for the rest of the Army. Emphasizing that the air stations were comparatively new, while the great majority of ground posts had been built by local commanders many years before, Hartman commented: "The fact that the construction of the Air Corps stations has been satisfactory is very gratifying, inasmuch as the Office of The Quartermaster General is entirely responsible for that condition." Repeatedly the question had arisen why Constructing Quartermasters took their orders from Washington rather than from post and corps area commanders. The day was long past, Hartman said, when non-professionals could do construction. Nowadays a corps of specialists was required. Commanders could not themselves direct CQM's with any degree of competence, nor could they justify the expense of maintaining separate technical staffs. Hartman warned that if authority were decentralized, construction would be back where it was in the spring of 1917. Having disposed of these objections, he took the following stand:

In light of the lessons of the past and the recognized civilian practice, . . . the need of a strong centralized organization is

³⁷ (1) Ltr, Arnold to TAG, 11 Aug 38. AAF Central Files, 611 A to Jul 40. (2) 1st Ind, Arnold to TAG, on TWX, Herron to Arnold, 14 Nov 38. QM 600.1 (Hickam Fld) II.

³⁸ (1) Draft of Ltr, TAG to CG's, Panama Canal and Hawaiian Depts, 2 Dec 38. G-4/31288. (2) Memo, Tyner for Marshall, 16 Jan 39. G-4/30552. (3) Memo, Tyner for Craig, 18 Feb 39. G-4/31288. (4) WD Ltr (2-18-39) Misc D to CG's, Panama Canal and Hawaiian Depts, 25 Feb 39. AG 600.12 (2-18-39).

important, first, because a central organization can be more efficiently and economically managed and controlled, and second, [because] responsibility can more readily and directly be placed The present plan of operation provides for much needed centralization of advisory and directing functions, a decentralization of necessary supervisory and executive duties, and the ability to expand to meet construction requirements of almost any character. Such a plan, past experience indicates, is essential to meet war time demands.

He recommended continuation of the current policy. On 24 March General Tyner signed the memorandum and forwarded it to G-3 and the War Plans Division (WPD) for concurrence. But those divisions did not concur.³⁹ They now had before them a proposal of another kind, one to give the airfield projects to the Corps of Engineers.

Behind the scenes, a powerful triumvirate was seeking to effect a transfer. The Assistant Secretary sparked the movement to take construction from The Quartermaster General. In Johnson's eyes, the Quartermaster Corps was a clumsy, slow-moving outfit that seldom finished anything on time, while the Engineers were experienced technicians who did the work assigned them expeditiously and well. General Marshall, now a leading candidate to succeed Craig as Chief of Staff, also believed the Engineers would do a better job. He held, moreover, that additional experience with peacetime construction would strengthen the Corps for its wartime mission of building in theaters of operations. "All along," he wrote, "I favored the Engineer Corps to handle construc-

tion."⁴⁰ The President, too, was for making the change, though he gave Johnson to understand that there must be no fight in Congress. It was with this backing that Colonel Maxwell on 28 March proposed that the Chief of Engineers be charged with building for the Air Corps.⁴¹

The National Defense Act offered a convenient loophole. As mentioned earlier, Congress had excepted fortifications when it assigned military construction to the Quartermaster Corps in 1920. The same day that Maxwell made his proposal, General Tyner began investigating whether airfields could be considered fortifications and as such turned over to the Engineers. The Judge Advocate General held that runways, hangars, and other technical structures, as distinct from housing, could be so considered. But because he doubted the legality of diverting funds appropriated for one branch to another, he advised Tyner to wait until Congress voted construction money directly to the Engineers. Taking issue with the Judge Advocate, the Budget Officer for the War Department saw no objection to shifting funds about.⁴² Meanwhile, General Marshall had talked the matter over with the Chief of Engineers, Maj. Gen. Julian L. Schley, who recalled: "I remember . . . Marshall as the strong advocate of having the Corps build the airfields. He discussed the

⁴⁰ Replies to Questionnaire, Marshall to authors, received 23 Apr 56.

⁴¹ (1) Johnson Interv, 9 May 56. (2) Memo, Maxwell for Marshall, 28 Feb 39. (3) Memo, Maxwell for ACoS WPD, 28 Mar 39. Last two in Maxwell's Papers.

⁴² (1) Memo, Tyner for JAG, 30 Mar 39. (2) Memos, JAG for Tyner, 3 Apr 39, and BOWD for Tyner, 10 Apr 39. All in G-4/31324.

³⁹ Memo, Tyner for Craig, 24 Mar 39. AG 211.99 CQM (4-1-36).



GENERAL SCHLEY

subject with me several times and I expressed my interest in the successful transfer of this work.” Aware of the political dangers involved, Marshall told the Engineers to stay in the background. The Corps, he said, must take no active part but must leave negotiations entirely in his hands.⁴³

As much as he desired to see construction transferred, General Schley wished to avoid spreading his Corps too thin. He was concerned primarily with developing able military engineers who could serve, along with Infantry and Artillery, as members of the combat team and carry out major construction in theaters of war. In early 1939 there were approximately 775 active Engineer officers. Three-quarters of them were on duty with the Corps, engaged in mapping, supply, research and development,

troop training, and construction of river, harbor, and fortification works. The remainder were detailed to other organizations. Already, the Engineers had a number of jobs to fill that had little relation to military engineering, and Schley was wary of taking on more.⁴⁴ While he welcomed the opportunity of doing the Army’s construction, he feared that his “officer personnel . . . would be wasted if burdened also with the troublesome job of maintenance.”⁴⁵

Schley viewed the problem from still another angle. The Engineers, he felt, must not stress building work so much that they lost sight of combat. A civil works program costing in excess of \$275 million was in prospect for fiscal year 1940.⁴⁶ On 10 April Schley indicated to Tyner his willingness to undertake a small part of the Air Corps program. He understood, he said, that the task proposed for the Engineers was to build the technical features of five new air bases. In agreeing to accept this job, he was making certain assumptions: maintenance would be left to the Quartermaster Corps; the airfield projects would be assigned to the districts and divisions of the Engineer Department, which handled civil works and fortifications; and the Engineers would be free to carry out construction “in such manner as may be most expeditious and economical and to the best interests of the Government.” Schley reminded Tyner that use of WPA funds would be inefficient

⁴⁴ (1) *Ibid.* (2) Annual Report Covering Military Activities of the Corps of Engineers for the Fiscal Year Ending June 30, 1939, pp. 1-3.

⁴⁵ Ltr, Schley to EHD, 19 Feb 57.

⁴⁶ (1) Interv with Maj Gen Julian L. Schley, 26 Oct 55. (2) Incl, Appns for Mil and Civil Functions CE, with Memo, Chief Budget and Programs Div OCE for Chief EHD, 6 Jan 55.

⁴³ Incl with Ltr, Schley to EHD, 5 Sep 53.

and might delay completion. As for "the larger question of the future responsibility of the Corps of Engineers for construction and maintenance of Air Corps technical features," Schley asked that this be settled later.⁴⁷

Tyner decided to let well enough alone. On 15 April, he told Craig why he believed the proposed change should not be made. There were, he knew, sound arguments in favor of a transfer. The Quartermaster General had too many duties, and the Engineers would undoubtedly turn in a fine performance. Tyner for many years had felt that construction belonged with the Engineers. But to detach a part of the program—either the runways and hangars at five fields, as discussed by Schley, or all Air Corps technical structures, as actually proposed—seemed to him unwise. Every post affected by the move would have two construction offices buying land, making layouts, and competing with one another for labor and supplies. The job of administering building funds would be much more difficult. And what of the Construction Division, which would still be charged with the bulk of the work? Surely, its morale would suffer. For the present, Tyner held, things ought to stay the way they were. Perhaps later the Defense Act could be amended to transfer all construction to the Engineers. He concluded with the following reminder:

A contributing factor in raising the basic question at this time is the fact that considerable apprehension exists within the War Department General Staff as to the qualifications and capabilities of the head of the Construction Division [General Seaman] . . . , to carry to successful comple-

tion the huge construction program now underway and in immediate prospect. In this apprehension I frankly share. It is desired, however, to point out that this is a personnel problem which should be solved on its own merits Certainly, the War Department should not . . . endeavor to correct a faulty personnel situation by making a hasty change in basic organization.⁴⁸

Under its system of concurrences, the General Staff made no changes in policy until all interested branches had approved. Hence, Tyner's opposition stopped the move to classify airfields as fortifications.

By this time a way was open to transfer all construction to the Engineers without amending the Defense Act. On 3 April Congress had passed the Reorganization Act of 1939, authorizing the President to overhaul the administrative machinery of the government by regrouping agencies and transferring functions. Soon afterward, Roosevelt asked Woodring what changes ought to be made within the War Department. By mid-April the General Staff was considering whether to recommend that Quartermaster construction work go to the Engineers.⁴⁹ General Tyner favored such action. He argued that construction was a branch of engineering and should be handled by engineers rather than by specialists in supply. Schley had the right men for the job, the cream of the crop from West Point and many graduates of the finest civilian engineering schools. The transfer would be beneficial all the way around. The Engineers

⁴⁸ Memo, Tyner for Craig, 15 Apr 39. G-4/31324. See also Tyner Interv, 28 Sep 55.

⁴⁹ (1) 53 Stat. 561. (2) Ltr, BOB to SW, 14 Apr 39. (3) Memo, SGS for Tyner, 17 Apr 39. Last two in G-4/31343.

⁴⁷ Memo, Schley for Tyner, 10 Apr 39. G-4/31324.

would gain additional experience. The Quartermaster General would be shed of an onerous responsibility unrelated to supply. The War Department would have a single construction agency, one capable of attaining "a standard of efficiency not possible under the present set-up." Having concluded that maintenance and the group that oversaw it would have to remain with the Quartermaster Corps—a combat arm must not be burdened with "unnecessary and undesirable housekeeping duties," he said—Tyner proposed to move the other branches of the Construction Division to the Office of the Chief of Engineers. No abrupt change would be made in operating methods and personnel. Only gradually would the former Quartermaster organization be fitted into the Engineer scheme of things.⁵⁰

Although generally well received, Tyner's plan foundered. The Assistant Chiefs of Staff, G-1 and WPD, endorsed the plan, Craig seemed willing to go along, and Schley raised no objections.⁵¹ But the G-3, Maj. Gen. Robert M. Beck, would have none of it. On 22 April, in a memorandum of nonconcurrency, he explained his position:

Primarily it is believed that the present is a very inopportune time to make any such radical change in organization as is indicated. It should also be borne in mind that although the Corps of Engineers is charged with construction duties in the theater of operations, the character of this construction is of an

entirely different nature than is the permanent construction carried on at our various posts and stations during peacetime. It is doubted that the training obtained by the Corps of Engineers . . . would be of particular value during a period of national emergency.

As a matter of fact, Beck feared that giving the Engineers additional construction might impair their readiness for combat. Furthermore, he opposed splitting maintenance and construction.⁵² Since the General Staff would not act without G-3's approval, Tyner's plan was shelved. Perturbed by what he regarded as the Staff's inertia, Johnson forwarded papers to the White House, recommending the transfer. Learning of this, Secretary Woodring recalled the papers for reconsideration and pigeonholed them. Roosevelt's first reorganization plan, presented to Congress on 25 April, made no mention of military construction.⁵³

The Air Corps was the next to challenge the Construction Division. Late in April Arnold's office ordered commanding officers at air stations to draw layouts for the new housing proposed under the Expansion Program. Colonel Hartman soon learned of this development, for Constructing Quartermasters promptly sent him copies of the order, and local air commanders, faced with an unfamiliar task, appealed to him for help. Hartman lost no time in reminding Arnold that responsibility for layouts rested with The Quartermaster Gen-

⁵⁰ Memo, Tyner for Craig, 21 Apr 39. G-4/31343. See also Tyner Interv, 28 Sep 55.

⁵¹ (1) Memo, Tyner for Craig, 21 Apr 39, and concurrences thereon. (2) Note, Marshall to Craig (n.d.), and Craig's penciled comments thereon. G-4/31324.

⁵² Memo, Beck for Tyner, 22 Apr 39. AG 020 (4-21-39).

⁵³ (1) Johnson Interv, 9 May 56. (2) Statement of Gen Hartman, 5 Jul 55, p. 14. (3) *Public Papers and Addresses of Franklin D. Roosevelt*, 1939, pp. 245ff.

eral.⁵⁴ Arnold was conciliatory. Knowing commanders would shortly want to comment on layouts prepared by the Quartermaster Corps, he had sought to familiarize them with the problem beforehand. "The Chief of the Air Corps is greatly concerned over the construction phase of the program, since its completion on time is vital . . .," he wrote to Hartman on 6 May, "and this was one of his efforts to make sure that no Air Corps officer or agency causes or is responsible for any delay whatever."⁵⁵ Arnold failed to mention another step he had taken to expedite construction. Sometime around the first of May, he and Marshall had visited the Pacific coast, where they had discussed construction matters with Col. John C. H. Lee, the highly regarded division engineer at Portland. At Arnold's request, Lee had agreed to investigate the airfield program and report "what action, if any, seemed necessary to assure completion in two years."⁵⁶

Even before he took off on 9 May for a flying tour of airfield projects, Lee thought he knew what ailed the building program. According to his diagnosis, construction suffered from "excessive centralization . . . in The Quartermaster General's office, where it was

a secondary matter."⁵⁷ As Lee sped from place to place, inspecting ten jobs in thirteen days, he found much to confirm his view. Almost every project furnished him with an example of unsatisfactory progress or faulty design which might be laid to centralized control. He was shocked to learn that The Quartermaster General had let contractors set their own completion dates. Although a few Constructing Quartermasters impressed him favorably, he rated most of them as mediocre or worse. All of them appeared to be handicapped by the necessity of referring so many decisions to Washington. Reporting to Arnold on 23 May, Lee recommended immediate decentralization. On the 25th he discussed his findings with Gibbins, Seaman, and Hartman, who advised him that they considered "the present centralized system of design and control to be not only satisfactory but the best method . . . for the Army."⁵⁸ That same day Arnold wrote to Craig, enclosing Lee's report and urging that Gibbins be ordered to decentralize.⁵⁹

On reading Arnold's memorandum, General Tyner was much put out. Not one of the projects Lee had seen was in any way connected with the Expansion Program. All had been started in 1938 with WPA funds. That, said Tyner, explained why they were slow. Since none of the work was urgent and construction budgets were small, contractors had been permitted to fix the deadlines themselves. An Engineer, the G-4 intimated, ought to know that speed costs

⁵⁴ (1) Ltr, Hq 3d Wing GHQ Air Force to CO Barksdale Fld, La., 21 Apr 39. (2) Ltr, CQM Barksdale Fld to TQMG, 22 Apr 39. Both in QM 600.1 (Barksdale Fld) 1939. (3) TWX, CO Mitchel Fld, N.Y., to TQMG, 27 Apr 39. QM 600.1 (Mitchel Fld) (AC Program) 1939-40. (4) Ltr, Hartman to Arnold, 28 Apr 39. Last two in QM 600.1 (Mitchel Fld).

⁵⁵ 1st Ind, 6 May 39, on Ltr, Hartman to Arnold, 28 Apr 39.

⁵⁶ Memo, Lee for ACoS WPD, 8 Jun 39. WPD 3809-24.

⁵⁷ Interv with Lt Gen John C. H. Lee, 25 Apr 57.

⁵⁸ Memo, Lee for Strong, 8 Jun 39. WPD 3809-24.

⁵⁹ Memo, Arnold for Craig, 25 May 39. G-4/32165 Sec 1.

money. Dismissing Lee's report as unfair and irrelevant, he undertook to set Arnold straight. Decentralization was bound to create trouble. If Gibbins gave authority to the field, Constructing Quartermasters would have to bow to the wishes of higher ranking Air Corps and corps area officers. All sorts of innovations would be tried. Engineering standards would go out the window. There would be confusion and delay. After repeating the argument that most big civilian construction firms used the same system as the Quartermaster Corps, Tyner referred to his predecessor, Brig. Gen. George R. Spalding. An Engineer officer, Spalding had come into G-4 an advocate of decentralization and had left believing firmly "that the organization of the War Department for construction was fundamentally sound and should not be changed." Arnold had indicated that he would refuse to delegate his responsibility for Air Corps construction unless his demands were met. This attitude nettled Tyner, who declared: "The Chief of the Air Corps at the present time has no responsibility so far as construction is concerned other than making known his requirements and the necessity therefor."⁶⁰

Meanwhile, on 26 May, Arnold and Lee had left for the Caribbean with Brig. Gen. George V. Strong, Assistant Chief of Staff, WPD. In Panama they conferred with General Stone, who expressed dissatisfaction with the Quartermaster setup. He asked that he be given entire responsibility for construction in the Canal Zone and that the department engineer superintend the work. Moving

on to the West Indies, Arnold and his companions found the commander of the new Puerto Rican Department thinking along the same lines as Stone. Everywhere they went the three officers heard complaints against the Quartermaster system. At one point during the trip, General Strong asked Lee what steps were necessary to meet present and future construction requirements. By the time they returned to Washington early in June, Lee was ready with an answer.

On 8 June, in a lengthy memorandum, he suggested drastic changes in the Army's construction organization. To insure timely completion of the Air Expansion Program, Gibbins should decentralize at once. Colonel Hartman should give way to "a carefully selected military engineer, accustomed to decentralized control and to getting work properly completed on time." The field should take over planning and design. "Competent military engineers," who would co-operate fully with corps area and department commanders, should replace unsatisfactory Constructing Quartermasters. If Gibbins did not have enough qualified officers, district and department engineers should take over part of the program. Lee looked forward to the time when his own Corps would do all military construction. "For the eventual assurance of Army construction efficiency with probable ability to meet any future emergency," he wrote, "all such work should, in my opinion, be transferred after a reasonable transition period and be placed under the supervision of [the] Chief of Engineers."⁶¹

⁶⁰ Incl, 29 May 39, with Memo, Tyner for SGS, 1 Jun 39. G-4/31265 Sec 1.

⁶¹ Memo, Lee for Strong, 8 Jun 39. WPD 3809-24.

The question remained open, as Lee's memo gathered dust. For the present, Hartman had his way. With Tyner's help, he even succeeded in tightening control over operations in the field. General Craig took responsibility for drawing plans and specifications away from the department commanders and gave it to The Quartermaster General. He also sent Constructing Quartermasters to Puerto Rico and Alaska with instructions to report directly to Gibbins.⁶² But, although centralization was stronger than before, the Construction Division's future remained in doubt. Toward the end of June, in his final report to the Secretary of War, General Craig observed: "The Quartermaster Corps, now charged with construction, has a task of first magnitude to perform in the supply and maintenance of troops I believe the Corps of Engineers should be utilized to relieve that Corps of the additional responsibility for new construction."⁶³ When General Marshall succeeded Craig in September 1939, some read the handwriting on the wall. Col. Edmund B. Gregory, soon to become The Quartermaster General, believed a transfer was now inevitable. Years later he disclosed: "I knew it was foreordained . . . ,



GENERAL GREGORY

the thing was all settled when General Marshall became Chief of Staff."⁶⁴

Quartermaster Plans and Preparations

In an atmosphere of uncertainty, the Construction Division prepared to build. Lights burned late in the Munitions Building as Colonel Hartman pressed to get the program started. He had no time to lose. Under a recent amendment to the Manchu Law, no officer below the rank of general could remain in Washington longer than 5 years at a stretch. In August Hartman's tour would end. How would the work go then? Having almost completed the \$80

⁶² (1) Memo, Tyner for Craig, 24 Jun 39. G-4/31288. (2) WD Ltr AG 600.12 (6-24-39) (Misc) D to CG's, Panama Canal and Hawaiian Depts, 30 Jun 39. QM 600.1 (Panama) (AC Expansion) I. (3) Ltr, Seaman to Lt Col R. W. Riefkohl, 27 May 39. QM 600.1 (Borinquen Fld) 1939-40. (4) Ltr, Seaman to CQM Ogden OD, Ogden, Utah, 27 May 39. QM 600.1 (Ladd Fld) II.

⁶³ *Report of the Secretary of War to the President, 1939*, p. 32.

⁶⁴ Verbatim Rpt of Mtg, Maj Gen Edmund B. Gregory, Maj Gen Kester L. Hastings, the authors, *et al.*, 29 Jun 55, p. 31. EHD Files. Cited hereinafter as Verbatim Rpt, Meeting with Gregory and Hastings.

million PWA-WPA program begun in 1938, the Construction Division seemed ready for larger, more difficult tasks. The branch chiefs were experienced men. Colonel Pitz headed New Construction and Major Nurse, Planning. Lt. Col. Rigby D. Valliant, a 1902 West Point graduate, was in his second term as chief of Real Estate. In charge of Repairs and Utilities was Maj. Will R. White, a civil engineer who had joined the Cantonment Division in 1917. With 12 officers and some 1,300 civilians in the central office and 108 officers in the field, the organization appeared to be adequate. Since returning to the Construction Division in the summer of 1938, Hartman had pushed preparations for emergency work with every means at his command, and, despite Seaman's reluctance to co-operate, progress had been good. But there was, Hartman realized, another side to the coin. The arrangement whereby he ran the division while Seaman continued as titular head had made for divided loyalties. Opinions differed sharply on such basic matters as mobilization planning, structural designs, and contracting methods. Under the circumstances, Hartman wanted plans completed, policies agreed to, and at least some projects under way before he left town.⁶⁵

In the absence of a well-defined construction program, planning went slowly. Johnson's decision to wait for WPA money placed the Quartermaster Corps in a tight spot. Hartman knew in general what would be built in Panama, Puerto Rico, and Alaska and roughly how much money would be spent there, but that was all. Parts of the program submitted to

Congress were so vague that one representative asked, "Why, in the name of heaven, should we hold hearings on a thing like that?"⁶⁶ Tyner tried repeatedly to force a decision as to which projects would be built with the \$62 million requested from Congress.⁶⁷ But Johnson insisted on waiting. Meanwhile, he demanded that plans be developed for all the proposed projects with a view to using a maximum of WPA money and a minimum of military funds. "Until this is done," he held, "it is premature to determine that any of the items cannot be undertaken."⁶⁸ What Johnson asked appeared to be impossible. Major Nurse had no way of knowing what limitations Congress would place on the future expenditure of WPA funds or how many relief workers would be available in various localities some months hence. Moreover, even with \$25 million in WPA money—possibly even with \$50 million—funds would still be insufficient for all the projects Johnson wanted. The situation did not improve until early June, when Tyner issued an unofficial directive, telling the Quartermaster to push ahead with plans for the overseas projects, the three air depots, and additions to a number of Air Corps stations.⁶⁹

Until sites were chosen, planning could not begin. For many years boards of officers appointed, in some cases, by

⁶⁶ H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*, p. 42.

⁶⁷ (1) Memo, Tyner for G-1, 17 May 39. G-4/31265-2. (2) Memos, Tyner for Craig, 13, 24 May 39. G-4/31265 Sec 1.

⁶⁸ Memo, Johnson for Craig, 15 May 39. G-4/31265 Sec 1.

⁶⁹ (1) Memo, with Incl, Tyner for SGS, 29 May 39. G-4/31265 Sec 1. (2) WD Ltr AG 600.12 (5-25-39) Misc D to TQMG, 3 Jun 39. QM 600.1 (Misc 1939).

⁶⁵ Statement of Gen Hartman, 5 Jul 55, pp. 2, 5.

the War Department and, in others, by corps area or department commanders, had selected locations for new installations. The General Staff and, when appropriate, the using service, reviewed the boards' recommendations. Final decision rested with the Secretary of War. For some months, site boards had been out seeking locations for the bases and depots the Air Corps wished to build. These boards, most of whose members Arnold named, were composed chiefly of airmen with a sprinkling of General Staff and Engineer officers. Often there was no Quartermaster representative. Despite an early start, progress was poor. Survey teams visited many sites, but because none was ideal, the Air Corps had difficulty choosing among them.⁷⁰ Asked what progress the boards were making, General Arnold said on 17 May, "Never in the history of the Air Corps has the War Department gone to such lengths in the consideration of all requirements before deciding upon . . . locations."⁷¹ Quartermaster officers were inclined to question this statement, for several of the sites favored by the Air Corps left much to be desired from a builder's point of view.⁷²

While the site boards deliberated, Quartermaster planners centered their

attention on existing posts. Construction estimated to cost some \$34 million was in prospect at Air Corps establishments in the continental United States, Panama, and Hawaii. Among the items to be provided were barracks and quarters, shops and warehouses, storage for gasoline and oil, runways, aprons, hardstands, hangars, laboratories, offices, hospitals, and schools. Late in April Colonel Hartman began submitting layouts for various stations to Arnold for approval. Among the structures shown on these layouts was a two-story mobilization-type barracks with inside plumbing and hot air heat. Several weeks went by and not one of the layouts had received approval. The reason was soon apparent—Arnold would accept no plan calling for mobilization-type barracks.⁷³

Since January he had been telling congressional committees that temporary shelter could be provided cheaply. Before the House Appropriations Committee on 17 May, he testified:

Mr. Engel. What will the temporary quarters cost?

General Arnold. One hundred and fifty dollars per man.

Mr. Engel. Those will have to be replaced ultimately.

General Arnold. The ones we are living in now in the Air Corps at certain stations have been there since the World War, for 21 years.

Mr. Engel. You have gotten your money's worth out of them.

⁷⁰ (1) Wesley F. Craven and James L. Cate, eds., *The Army Air Forces in World War II*, vol. VI, *Men and Planes* (Chicago: University of Chicago Press, 1955), pp. 127–28. (2) WPD 3809–24 (Landing Flds). (3) Memo, Tyner for TAG, 25 May 39. G–4/31265 Sec 1. (4) Memo, Seaman for Tyner, 18 May 39. QM 600.1 (Misc) (1939).

⁷¹ H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*, p. 45.

⁷² (1) Intervs with Gen Seaman, 21 Jul 55, 2 Oct 57. (2) Verbatim Rpt, Meeting with Gregory and Hastings. (3) Incl with Ltr, Col Elmer G. Thomas to EHD, 31 May 56.

⁷³ (1) H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*, pp. 114–49. (2) Ltr, Seaman to Arnold, 25 Apr 39. QM 600.1 (Mitchel Fld) (AC Program) 1939–40. (3) Ltr, Hartman to Arnold, 29 Apr 39. QM 600.1 (Barksdale Fld) VI. (4) Ltr, Hartman to Arnold, 9 May 39 with 1st Ind, 11 May 39, and 2d Ind, 18 May 39. QM 600.1 (AC) 1937–39. (5) Memo, Tyner for G–1, 17 May 39. G–4/31265–2.

General Arnold. We have had our money's worth out of them; yes sir.⁷⁴

The reference to World War housing was misleading, for housing of that type could not be had at Arnold's price. The average cost of the old cantonments had been \$215 per man. It was true, of course, that most of them had been built on virgin tracts. But it was also true that hourly wages in the building trades had more than doubled in the intervening years.⁷⁵ Moreover, the structures Arnold had in mind bore little resemblance to World War barracks.

The Air Corps' answer to the housing problem was the portable building or prefab. At CCC camps throughout the country, portables had been erected at a cost of \$160 per man. Much of the work had been done by the men themselves. Confronted, on the one hand, with an increase of 26,000 men in the Air Corps and, on the other, with a slim construction budget, Arnold had decided to have barracks prefabricated and to let troops put them up. The plan was visionary, to say the least. Shelter provided at CCC camps did not meet the Army's heating and space requirements. The building trades unions, stronger now than in the early years of the New Deal, were certain to protest. Moreover, prices of materials were on the rise.⁷⁶ Told that

he would have to provide prefabricated housing at \$150 per man, Colonel Hartman exclaimed, "It is an impossible task. . . . You will spend more than that on utilities outside the building." The Air Corps had an answer to that: use utilities that were already there; in other words, put prefabs in among permanent buildings. Hartman refused to consider the idea. He told a member of Arnold's staff, "If the plan of the Chief of the Air Corps is carried out, . . . a fire hazard will be created that will endanger millions of dollars worth of construction."⁷⁷ Despite Hartman's contention that mobilization-type buildings offered superior accommodations at a lower price, Arnold continued to hold out for prefabs. General Tyner made Hartman's position more difficult by siding with the Air Corps on this issue.⁷⁸

Asked repeatedly by Johnson and Arnold when certain projects would be completed, General Seaman declared, "The *immediate* and *pressing* question is *when* they can be *started*."⁷⁹ Once site choices were firm and full topographic and subsurface data were available, it might take a month or more to make layouts for the new bases. Then would come the task of drawing detailed plans and specifications. How fast this work would go was a question. Major Nurse's staff of engineers and draftsmen was too small to cope with any considerable number of crash projects; yet the long-awaited formal directive was now cer-

⁷⁴ H Subcomm of the Comm on Appns, 76th Cong, 1st sess, *Hearings on Supplemental Military Appropriation Bill for 1940*, p. 46.

⁷⁵ (1) Incl with Ltr, R. C. Marshall to OCMH, 30 Mar 55. EHD Files. (2) U.S. Departments of Commerce and Labor, *Construction Volume and Costs, 1915-1954, A Statistical Supplement to Volume I of Construction Review* (Washington, 1955), Table 9, p. 27.

⁷⁶ (1) Ltr, Arnold to TQMG, 21 Jun 39. QM 600.1 (AC) 1937-39. (2) Memo, Seaman for Tyner, 23 Jun 39. G-4/31265 Sec 1. (3) Memo, Pitz for G-4 Rcd, 28 Jun 39. G-4/31265 Bulky.

⁷⁷ Notes of Conf, Baade, Hartman, Spaatz, *et al.*, 20 Jun 39. G-4/31265 Bulky.

⁷⁸ (1) Memo, Seaman for Tyner, 25 Jun 39. QM 600.1 (Misc) 1939. (2) Notes of Conf, Arnold, Tyner, Pitz, *et al.*, 28 Jun 39. G-4/31265 Bulky.

⁷⁹ Memo, Seaman for Tyner, 18 May 39. QM 600.1 (Misc) 1939.

tain to come as a rush order. Moreover, a single change might upset a good deal of careful planning, and, according to Hartman, "No branch of the War Department was so changeable as the Air Corps."⁸⁰ After Nurse had finished, more time would go into advertising for bids and awarding lump-sum contracts.

Drawing on his wartime experience Colonel Hartman devised a plan for getting around some of these obstacles. In May 1939 he moved to revive the wartime contract. "I started early," he wrote, "to get the necessary legislation to handle construction on a cost-plus-a-fixed-fee basis."⁸¹ As one who had served with the Construction Division of the Army, he knew firsthand the advantages of the fixed-fee agreement; and he was also familiar with the criticisms raised against it. Obtaining authority to use the contract might not be easy. The competitive system of awarding government contracts was by now very nearly sacrosanct. Many in the War Department disliked cost-plus contracting in any form. Others feared it. Still others preferred the evaluated-fee agreement for emergency use. In his efforts to overcome this opposition, Hartman had help from General Tyner and Rear Adm. Ben Moreell of the Navy's Bureau of Yards and Docks. On 25 April Moreell got authority from Congress to negotiate fixed-fee contracts for construction outside the United States and to employ architectural and engineering firms without reference to the law requiring competition. With Moreell's encouragement, Hartman and Tyner incorporated the pertinent provisions

of the Navy's bill into one of their own. They next enlisted the support of the Chief of Staff and the Secretary of War. On 18 May Woodring sent the measure, with his endorsement, to Chairman Sheppard of the Senate Military Affairs Committee and to Speaker William B. Bankhead, who shortly introduced it in both houses.⁸² The bill was introduced in the House on 23 May and in the Senate on 6 June.

The construction industry was delighted with the bill. The quickening of military preparations was causing some concern in contracting circles. Costs were rising and risks increasing. Bidders were thinking in terms of larger contingency items. Construction men were fearful lest a sharp jump in contract prices slow the industry's progress toward recovery.⁸³ AGC officials believed the situation called for a change in contracting methods. Reporting to the association's members in the fall of 1939, Managing Director Edward J. Harding declared:

A solution . . . will become clearer when owners understand that the general contractor performs two functions. He not only constructs the project, but he insures its completion for an agreed upon price. When insurance alone is purchased, the purchaser expects to pay an increased premium to cover increased hazards. So it should be in construction; the purchaser should either expect to pay [the] appropriate cost of the insurance for completion of the project, or

⁸² (1) Tyner Interv, 28 Sep 55; Pagan Interv, 8 Mar 57. (2) 53 *Stat.* 591. (3) Memo, Tyner for Craig, 16 May 39. (4) Ltrs, Woodring to Sheppard and Bankhead, 18 May 39. (5) Memo, OCofS Budget and Legis Plng Br for Craig, 24 May 39. Last three entries in G-4/31364.

⁸³ (1) Telg, Harding to Johnson, 8 Aug 39. QM 600.1 (Ladd Fld) (AC Program) I. (2) *The Constructor*, October 1939, p. 14.

⁸⁰ Statement of Gen Hartman, 5 Jul 55, p. 4.

⁸¹ *Ibid.*: D. 11.

he should be his own insurer, and relieve the contractor of that burden.⁸⁴

Here, then, was an argument for the fixed-fee contract, under which the purchaser was self-insured and the contractor assumed very little risk. Fixed-fee contracts imposed no penalty for delay and required no performance or payment bonds. Less hazardous than fixed-price agreements, they were also more easily financed, since reimbursements to the contractor did not need to lag much behind expenditures. Authorization of fixed-fee agreements for overseas projects might help point the way toward more liberal terms for domestic contracts also.

In certain quarters of the War Department, the measure got a cold reception. While his advice had not been asked, General Seaman was dead set against the fixed-fee contract.⁸⁵ He summed up his attitude in a statement to a congressional committee in 1941: "We never would have had any cost-plus jobs if I had my way about it. I don't believe in it. Too expensive."⁸⁶ A more formidable opponent was Louis Johnson, whom the authors of the bill had not consulted either. On learning that such a measure had been introduced in Congress, he protested to General Craig. Johnson maintained that the Defense Act gave him, as business head of the War Department, the same responsibility for construction as for other procurement activities. The General Staff opposed this view. Thus began a "paper war" which lasted well into 1940, each side bombarding the other with memorandums detailing their respective respon-

sibilities for construction. The issue was finally settled in the Assistant Secretary's favor. Meanwhile, Johnson threw the weight of his influence against what he apparently considered a premature switch to the fixed-fee method.⁸⁷

On 23 June 1939 the Senate Military Affairs Committee held a hearing on the bill. Tyner and Hartman were the only witnesses. The G-4 explained why the proposed legislation was necessary. It was imperative, he said, that the overseas bases be completed at an early date. If competitive contracts were used, it might take two and one-half years to finish the work—two months for readying plans and specifications, two more for advertising, two more for getting the jobs under way, and because fixed-price contractors would insist on plenty of time, two years for construction. Tyner warned that the competitive method would also be very expensive. Because bidders would have to take into account "unusual hazards, the uncertainty of weather, the distance from material and labor markets, and the cost of overcoming unforeseen construction difficulties," contingency items would be huge. The fixed-fee contract offered a ready solution to these problems. In the absence of plans and specifications, construction could begin and go forward along with design and engineering work. Changes in the character and scope of a project could be made at any time and without much trouble. Moreover, since the government would assume nearly all the risk, it would probably pay less for fixed-fee construction. Coming to the matter of architect-engineer con-

⁸⁴ *The Constructor*, October 1939, p. 21.

⁸⁵ Seaman Intervs, 14, 21 Jul 55, 2 Oct 57.

⁸⁶ Truman Comm Hearings, Part 7, p. 2019.

⁸⁷ (1) G-4/31381. (2) G-4/31364. (3) Incl, 23 Mar 56, with Ltr, Brig Gen John W. N. Schulz to EHD, 24 Mar 56.

tracts, Tyner revealed that the War Department could not quickly enlarge its professional staff. Federal pay scales were too low and Civil Service procedures too cumbersome. Even office space was lacking. "The obvious alternative," he told the committee, "is to engage the services of private engineering and architectural firms or individuals to supplement the work of the War Department." With these professionals, negotiation was obligatory, for their national associations had declared competition in regard to fees unethical. Furthermore, Colonel Hartman added, "It is as illogical to advertise for the services of an engineering or architectural specialist as it would be to advertise for the services of a medical specialist."⁸⁸

In response to the Senators' questions, Hartman described the fixed-fee contract and how it worked. The agreement was, as he phrased it, "essentially a contract for service." Under its terms, the contractor would furnish labor, materials, and equipment and do everything necessary to complete the job in the shortest possible time. The government would reimburse him for all his expenses except home office overhead, executive salaries, and interest on borrowed money. Hartman emphasized that this was not a percentage agreement. In payment for his services, the contractor would receive a fee, determined at the time of negotiation and based on the original estimate of cost. No change in the amount of the fee would be made unless the scope of the project was ma-

terially altered. The contractor's fee was like a salary. "We are hiring his brains and his organization to do the job for us," Hartman said. After pointing out that noninsurance of government property was a well-established principle, he went on to explain that the fixed-fee contract had long been used by such big corporations as General Motors and DuPont, which were in a position to spread risks widely. When several Senators asked whether contractors might not defraud the government by falsifying accounts, Hartman assured them that the War Department would have "absolute check and control" over all expenditures. While he maintained that including the terms of the contract in the bill would make the law too inflexible, some of the members suggested that the legislation should be specific on that point. "As I understand it," said one, "you have stated what the intentions of the War Department are . . . but there is nothing in the law to guarantee that what you say . . . will be carried out, is there?" "No, sir," Hartman answered, "except that we are all officers of the Government and bound to look after the interests of the Government and that is our intention."⁸⁹ Apparently satisfied, the committee reported the bill favorably. Some time would elapse before the proposal came to a vote.

During June 1939 Congress was occupied with other urgent legislation. The War Department followed with particular interest the progress of two important bills. The first, the supplemental military appropriation bill for 1940, carried the funds for air expansion and for new posts

⁸⁸ S Comm on Mil Affs, 76th Cong, 1st sess, *Hearings on S 2562, A Bill to Facilitate Certain Construction Work for the Army, and for Other Purposes*, pp. 3-6, 14.

⁸⁹ *Ibid.*, pp. 7-15.

in Panama. It also increased the enlisted strength of the Army from 174,000 to 210,000. Approved on 1 July 1939, the measure provided \$64,862,500 for construction plus a contract authorization of \$21,337,500 and made available additional sums totaling \$4,208,459 for maintenance, repairs, and real estate. The second bill contained the appropriation for work relief. Owing largely to the efforts of the Associated General Contractors, the bill was amended to prohibit WPA from participating in the construction of any federal building which cost more than \$50,000. With approval of the relief act on 30 June, hopes of using large sums of WPA money on military projects collapsed.⁹⁰ Referring to the \$50,000 limitation, Colonel Baade said, "That throws out most of our buildings—everything in the United States and Hawaii."⁹¹

With passage of the appropriation bills, the program took shape rapidly. At a series of meetings, funds were earmarked and differences of opinion were reconciled. On 28 June Arnold, Tyner, Pitz, and members of their staffs held an all-day conference to decide how far the military appropriation—the "gold money" they called it—would stretch. Arnold and Tyner had agreed beforehand what priority each job would have. As Colonel Baade read down the list, the others determined how much relief money could be used for each job and how much "gold" would have to be allotted. Late that afternoon Tyner telephoned Marshall to report that the "gold money" had run out. By including \$4 million

in WPA funds, a large part of it for grading, the conferees provided for troop housing in Panama and most of the Air Corps jobs. But the air depots and the Ordnance and Signal projects had had to be left out. At an informal get-together on the 30th, the Chief of Ordnance persuaded Tyner and Brig. Gen. Lorenzo D. Gasser, whom Marshall had recently chosen as his deputy, to divert \$400,000 from the Alaska air base to two laboratory projects. For a time Johnson persisted in trying to use larger sums of WPA money, but at length he agreed to ask for a deficiency appropriation to cover the remaining industrial and depot projects. At Tyner's insistence, Seaman and Arnold ironed out their differences over design; Arnold accepted the Quartermaster layouts and withdrew his objections to mobilization-type barracks, and Seaman promised to give the prefabricated industry an opportunity to compete for housing contracts. Affairs were soon in order. On 13 July, after months of waiting, Gibbins was formally directed to begin construction.⁹²

Construction Gets Under Way

When the directive reached General Seaman's desk, the Construction Division was set to go. New mobilization drawings were complete and detailed plans and layouts for many Air Corps projects were ready. By mid-July 1939 the di-

⁹⁰ (1) 53 Stat. 992. (2) 53 Stat. 932. (3) Memo, G-4 for DCofS, 29 Jul 39. G-4/29778.

⁹¹ Notes of Confs, Arnold, Tyner, Pitz *et al.*, 28 Jun 39. G-4/31265 (Bulky).

⁹² (1) *Ibid.* (2) Memo, G-4 for Marshall, 28 Jun 39. AG 600.12 (1-23-36) sec. 1-c. (3) Memo, with Incls, Tyner for CofS, 30 Jun 39. G-4/31265. (4) Memo, CofOrd for Gasser, 30 Jun 39. AG 600.12 (1-23-36) Sec 1-c. (5) Memo, Tyner for CofS, 14 Jul 39. G-4/31265. (6) WD Ltr AG 580 (7-7-39) (Misc) (D) to TQMG, 11 Jul 39. (7) WD Ltr AG 580 (7-11-39) (Misc) (D) to TQMG, 13 Jul 39. Last two in QM 600.1 (AC) 1937-39.

vision was forwarding specifications to the field along with instructions to advertise immediately. In line with the agreement between Arnold and Seaman, Constructing Quartermasters were to call for alternate bids on mobilization structures and prefabs. Bids were to be opened not later than 10 August and shelter was to be available for the first increment of troops by 30 September. Meanwhile, at twenty-eight projects where WPA would participate, construction officers were working out arrangements with local relief authorities. At a cabinet meeting late in July Woodring reported that progress at existing posts was good and that prospects for the remainder of the program seemed bright. When he succeeded Hartman as executive officer early in August, Colonel Pitz had reason to believe that construction would go smoothly.⁹³

This hopeful outlook was due in no small part to the efforts of Colonel Valliant. The chief of the Real Estate Branch lost no time in getting land acquisition under way. Hardly had Woodring approved the location for a new installation when the veteran Quartermaster was on the scene. On 6 July Gibbins learned that Point Borinquen would be the site for the Puerto Rican air base. Three days later Valliant flew to the island to start condemnation proceedings. Shortly after the selection on

14 July of a site near Tampa for the southeast air base, the future MacDill Field, Valliant went to Florida to oversee the donation by Hillsborough County of 5,800 acres of land to the government. With the approval in August of a 5,000-acre tract near Chicopee, Massachusetts, for the New England air base—to be known as Westover Field—the Real Estate Branch acted promptly to take options, secure rights of entry, arrange for the relocation of power lines, and negotiate for a railroad right-of-way. Pressure for speed was great. Each site presented its particular challenge. Yet the work was, for the most part, swiftly and skillfully done.⁹⁴

Another encouraging development was passage of a deficiency appropriation bill. On 20 July the President sent to Congress a supplemental request for \$16,931,300. This sum covered construction at nine projects. The bulk of the money, \$14,730,900, was for two new air depots and additional facilities at two existing ones; \$400,000 was to pay back the account of the Alaska air base; and the remainder was for three Ordnance installations and the Signal Corps laboratory. Congress hastened to comply, and an act of August 9, 1939 gave the President all he had asked. Although eased considerably, the shortage of construction funds was by no means ended. General Arnold had tried unsuccessfully to insert an item for bombing ranges into the bill. Five important Ordnance projects had not been provided for. The

⁹³ (1) Memo, ExecO G-4 for Constr Br G-4, 18 Jul 39. G-4/31265 Sec 1. (2) Ltr, Constr Div to CQM, Barksdale Fld, La., 21 Jul 39. QM 621 (Barksdale Fld) 1939. (3) Ltr, Pitz to CQM's, 31 Jul 39. QM 600.1 (Barksdale Fld) 1938-39 II. (4) Memo, ExecO G-4 for Constr Br G-4, 26 Jul 39. (5) Memo, with Incl, Seaman for Tyner, 26 Jul 39. Last two in QM 600.1 (Augmentation Program) 1939.

⁹⁴ (1) Memo, Tyner for Gibbins, 6 Jul 39. (2) Telg, Gibbins to CG Puerto Rican Dept, 8 Jul 39. Both in QM 600.1 (Borinquen Fld) 1939. (3) Interv with Col Rigby D. Valliant, 11 Jun 56. (4) QM 601.1 (MacDill Fld) 1939. (5) G-4/31411. (6) OQMG Constr Div, Real Estate Branch Progress Report, 21 Feb 41, pp. 2-5. Copy in EHD Files.

funds available for buying land would probably be inadequate. Even so, the deficiency money gave the program a welcome boost.⁹⁵

During August gains were substantial. The Construction Division turned out a sizable number of plans and layouts. Woodring picked a site near Mobile, Alabama, for one of the new air depots and approved locations for most of the Panama projects. A board of officers headed by Colonel Lee completed a survey of airfield sites in Alaska, and Maj. Edward M. George, who was to direct construction there, left with a staff for the territory. Many new projects were starting up. Constructing Quartermasters were assembling work crews, renting equipment, buying materials, and beginning what jobs they could by purchase and hire. Bids were being opened and contracts awarded. Here and there a runway was being poured and a building was going up. On 7 August the President signed the fixed-fee bill, authorizing negotiated contracts for architectural and engineering services and for construction in Panama and Alaska.⁹⁶

While the program as a whole seemed to be going well, trouble spots were appearing. Several jobs fell behind because WPA could not furnish workmen. Changes in Air Corps requirements forced the abandonment of one project

and slowed construction at several others. The Quartermaster system of centralized control was encountering stubborn resistance from local commanders. General Arnold was becoming more and more critical of the Construction Division's methods. His agreement with Seaman regarding structural designs was not working out as the Air Corps had anticipated; contractors who based their offers on mobilization drawings were consistently underbidding prefab firms. Meanwhile, Johnson had renewed his efforts to transfer construction to the Engineers. Although initially unsuccessful, he had reason to be optimistic, for General Marshall assured him that a transfer was only a question of time.⁹⁷

Word that the Army planned to construct the Alaska air base by day labor created a stir in contracting circles. On 8 August the Lee board recommended building the base by purchase and hire. That afternoon the Assistant Secretary received a telegram of protest from the Associated General Contractors, urging that the job be done by the fixed-fee method.⁹⁸ In a reply framed by the Construction Division, Johnson stated that, since purchase and hire would take no longer and cost much less, Seaman was adopting the board's suggestion. Johnson went on to explain: "Execution of construction on the basis of cost-

⁹⁵ (1) Ltr, the President to the Speaker, H R, 20 Jul 39. (2) Ltr, Dir BOB to the President, 20 Jul 39. Both in G-4/31265 Sec I. (3) 53 Stat. 1301. (4) Memo, Tyner for Marshall, 24 Jul 39. G-4/30337-10. (5) Memo, G-4 for Marshall, 31 Jul 39. G-4/31190-1.

⁹⁶ (1) QM 600.1 (Panama) (AC Expansion) I. (2) QM 600.1 (Misc 1939). (3) QM 600.1 (Ladd Fld) (AC Program) II. (4) Incl with Memo, SGS for Marshall, 17 Aug 39. G-4/31265 Sec 2. (5) 53 Stat. 1239.

⁹⁷ (1) G-4/31265 Sec. 1. (2) QM 600.1 (Barksdale Fld) II. (3) Memo, Tyner for Gibbins, 25 Aug 39. G-4/31265 Sec II. (4) Memo, Marshall for Woodring, 1 Sep 39. G-4/31411. (5) 2d Ind, G-4 to TQMG, 1 Aug 39, on Ltr, TAG to TQMG, 3 Jun 39. QM 600.1 (Misc 1939). (6) R&R Sheet, Exec OCAC to Sup Div OCAC, 22 Aug 39. AAF Central Files, 600.1-600.12 I. (7) Ltr, Arnold to TAG, 9 Aug 39. G-4/31190-1. (8) AG 580 (3-31-26) (1) Sec 3A.

⁹⁸ (1) Ltr, Lee *et al.* to TAG, 8 Aug 39. WPD 3512-38. (2) Telg, Harding to Johnson, 8 Aug 39. QM 600.1 (Ladd Fld) (AC Program) I.

plus-fixed-fee is, in the final analysis, practically identical with procedure by purchase and hire with the exception that in the former case the government would pay to the contractor a considerable fee for the Alaska project."⁹⁹ The contractors expressed concern. "It is our hope," wrote AGC director Harding, "that this does not indicate a fundamental belief by the Quartermaster Corps that the use of contractors is superfluous, without advantage, on construction under difficult conditions."¹⁰⁰ While he refused to overrule Seaman, Johnson was reassuring. "The Quartermaster Corps, as you know," he reminded Harding, "is constantly utilizing the knowledge and skill of many contractors on numerous construction projects and expects to continue to do so."¹⁰¹

The outbreak of war in Europe on 1 September 1939 altered the construction picture. The President moved swiftly to tighten defenses and to step up the pace of military preparations. On 5 September he issued a proclamation of neutrality and transferred control of the Panama Canal from the Governor to General Stone. Three days later he proclaimed a limited national emergency and, by Executive Order, provided for expansion of the Regular Army from 210,000 to 227,000 men and of the National Guard from 200,000 to 235,000. Meanwhile, the War Department took steps to meet the situation. It drew up plans for a defense program to cost be-

tween \$850 million and \$1 billion, though the President made no request to Congress at this time. Reinforcements went to Puerto Rico and Panama. Additional demands rained in on the Construction Division: set up temporary tent camps for recruits; provide makeshift shelter in the Caribbean area; rush a runway to completion in Puerto Rico; expedite all work at outlying bases; and, above all, push the Panama jobs.¹⁰²

Autumn of 1939 was a busy time for the Construction Division. Hard pressed to meet the demands of the Expansion Program, Seaman and his organization faced a new series of rush orders growing out of the recent increase in the Army. There was more building to do but no supplemental appropriation to do it with. Funds for the additional work had somehow to be scraped together. Colonel Harrington was co-operative, giving priority in assignment of relief workers to construction for the recruits. But restrictions on spending WPA funds for materials limited the help that he could give. A total of \$3,640,000 came from Woodring's reserve and Gibbin's maintenance, fuel, and furniture funds. Sums also came from the accounts set up for Expansion projects, and, in some instances, troops did construction. Seaman tried by various methods to expedite the work. To relieve his overburdened design section, he took advantage of the Act of August 7 to employ private architects and engineers for seven large projects, including MacDill, Westover, and Borin-

⁹⁹ Ltr, Johnson to Harding, 17 Aug 39. G-4/31364. See also original draft of this letter by Seaman. QM 600.1 (Ladd Fld) (AC Program) II.

¹⁰⁰ Ltr, Harding to Johnson, 21 Aug 39. QM 600.1 (Ladd Fld) (AC Program) I.

¹⁰¹ Ltr, Johnson to Harding, 30 Aug 39. QM 600.1 (Ladd Fld) (AC Program) I.

¹⁰² (1) Watson, *Chief of Staff*, pp. 156ff. (2) Memo, Tyner for TAG, 1 Sep 39. WPD 4191-3. (3) WD Ltr 320.2 (9-11-39) M-D to CG Puerto Rican Dept, 20 Sep 39. WPD 4191-4. (4) Memo, Gasser for Tyner, 14 Sep 39. CofS, Emergency Measures, 1939-40 (Misc File). (5) DS, Tyner to Gibbins, 20 Nov 39. G-4/30552-28.

quen Fields and the Alaska air base. He and members of his staff made frequent trips to the field. He encouraged Constructing Quartermasters to keep in touch with Washington by telephone and report any bottlenecks at once. Lastly, he urged Woodring, Arnold, and local commanders to make decisions on construction matters quickly.¹⁰³

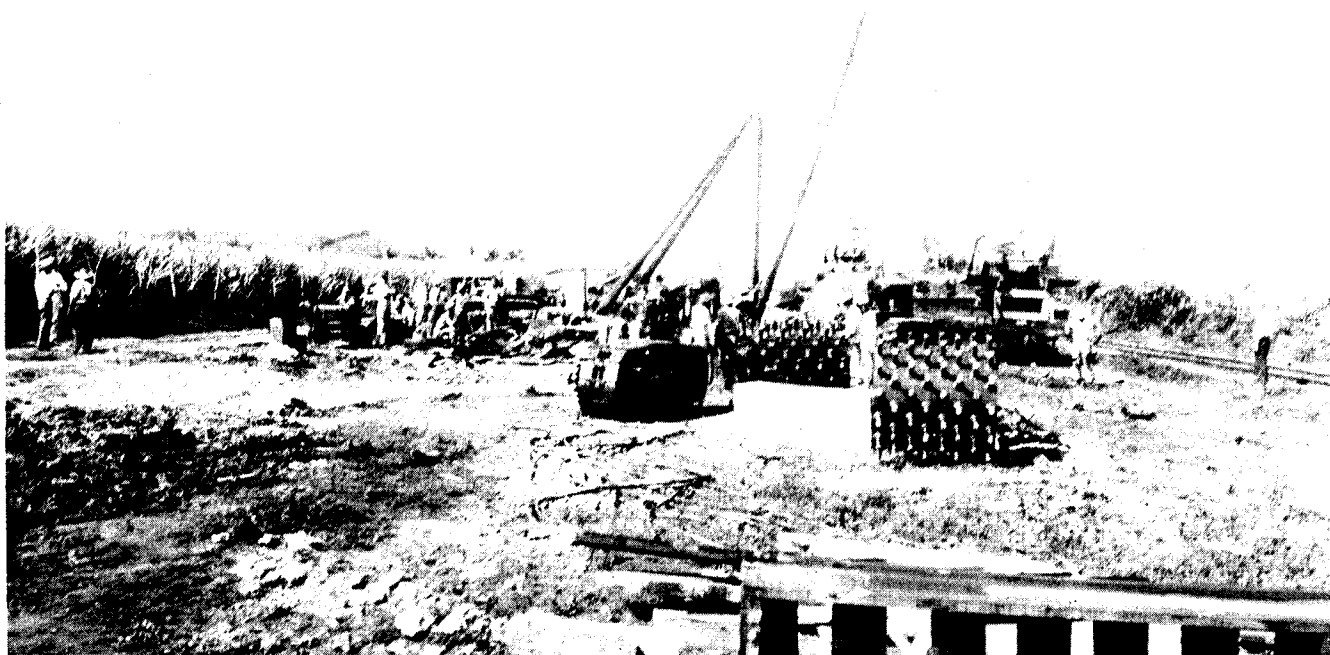
By the end of the year, Seaman had accomplished quite a bit. He had most of the land required for a dozen major projects. He had permanent construction at existing stations in this country under way. He had designs and blueprints for the Ogden Depot, Westover, and MacDill. He had completed practically all the temporary shelter. In Hawaii, Puerto Rico, and Alaska, work was proceeding according to plan. Contractors at Hickam Field were on or ahead of schedule. Under 1st Lt. Morton E. Townes, one of the young West Pointers who had chosen a construction career, work at Borinquen was going smoothly: the runway was in; the layout for the entire base had won praise from the department commander; and clearing, grading, and drainage operations were well along. Major George reported that the Alaska project was off to a promising start: planning was far advanced; a site at Fairbanks was under development; and preparations were moving ahead for the main construction effort in the spring. But while the program as a whole was progressing satis-

factorily, several key projects were lagging. One was the Mobile Depot, still delayed by lack of funds for land. Another was McChord Field, Washington, where boggy ground hampered runway construction. Of gravest concern was the work in Panama.¹⁰⁴

From the first the Panama jobs were beset by troubles. Early in 1939 disagreements had arisen over the choice of sites. After locations were firm, Hartman had difficulty getting layouts approved as first General Arnold and then General Stone challenged his plans. Maj. George F. Hobson, who took over the new post of Constructing Quartermaster in July, soon discovered that his was a tough assignment. He got a cold reception from Stone, who had had another man in mind for the position. In carrying out the emergency program, Hobson faced formidable obstacles. Except for brick and tile, virtually no construction materials were produced locally. Machinery was scarce. Skilled labor was at a premium and semiskilled workmen were hard to find. Hobson and his two assistants had to start from scratch to build an organization. When Seaman suggested that the Panama work be done by purchase and hire, Hobson opposed the idea. The two men were soon at odds. In September the outlook brightened. On the 5th Major Nurse flew to Panama, where he persuaded General Stone to approve the Quartermaster layouts. On the 8th a group of architects and engineers ar-

¹⁰³ (1) Memo, Wilson for Tyner, 23 Sep 39. QM 600.1 (Works Projects) V. (2) Ltr, Marshall for Harrington, 29 Sep 39. G-4/29778. (3) WD Ltr AG 600.12 Ft Sam Houston (9-28-39) to TQMG, 5 Oct 39. G-4/30002-70. (4) WD Ltr AG 600.12 (2-14-40) M-D to TQMG, 16 Feb 40. 652 I. (5) Seaman Interv, 2 Oct 57. (6) G-4/31265-2 to 10. (7) QM 600.1 (Ladd Field) (AC Program) I and II.

¹⁰⁴ (1) Memo, G-4 for Rcd, 6 Jan 40. G-4/30552-29. (2) Ltr, Hq Puerto Rican Dept to TAG, 21 Dec 39. QM 611 (Borinquen Fld) 1940. (3) Rad, CG Puerto Rican Dept to TQMG, 1 Dec 39. QM 600.1 (Borinquen Fld) (AC Program) 1939-40. (4) Ltr, Gibbins to CG San Francisco POE, 16 Dec 39. QM 600.1 (Ladd Fld) (AC Program) II. (5) Memo, Hartman for G-4, 4 Mar 40. QM 600.1 (Misc) 1940.



EQUIPMENT ARRIVING AT BORINQUEN FIELD, PUERTO RICO, *November 1939.*

rived from the United States. The next day Colonel Danielson replaced Major Hobson.¹⁰⁵

Late in September Woodring decided to do the Panama jobs by the fixed-fee method. By using emergency agreements he hoped not only to speed the work but also to cut costs by 35 percent. There would be three contracts, one for the Atlantic side and two for the Pacific. Leading construction firms would be invited to apply. A committee of three officers would rate the applicants on experience, organization, and financial responsibility and submit a list of those that seemed best qualified to the Secretary. A board headed by Woodring would then make final selections and conduct negotiations. Two of the of-

ficers named to the committee were Engineers—Col. John R. D. Matheson of Tyner's staff, and Capt. David A. D. Ogden of the Chief's office. The third member was Maj. Elmer G. Thomas, one of the few active Quartermaster officers who had directed a cost-plus project during World War I. As chief of the newly organized Fixed Fee Section of Seaman's office, Thomas would have charge of all work done under emergency agreements. Matheson, Ogden, and Thomas had no time to lose, for Woodring wanted the list as soon as possible.¹⁰⁶

At Gibbin's invitation, fifty of the nation's top constructors submitted applications. Among those who thus expressed their interest in a fixed-fee contract were such giant concerns as George A. Fuller, Mason & Hanger, Starrett

¹⁰⁵ (1) Memo, Lee for Strong, 8 Jun 39. WPD 3809-24. (2) Ltr, Hartman to Arnold, 5 Jun 39, with 1st Ind, 9 Jun 39. QM 600.1 (Albrook Fld) (AC Program). (3) QM 600.1 (Panama) (AC Expansion) I. (4) Memo, Seaman for Gibbins, 25 Jul 39. QM 600.1 (Panama) 1930-41.

¹⁰⁶ (1) Memo, Gasser for Gibbins, 30 Sep 39. G-4/31364. (2) Interv with Col Elmer G. Thomas, 27 Dec 55. (3) OQMG Office Order 34, 16 Oct 39. QM 020 (Constr) 1921-39.

Brothers and Eken, and the Walsh Construction Company. Although few of the other applicants were quite so strong financially as these companies, all enjoyed outstanding reputations. Some of the less prosperous firms proposed to work in combinations of two or three. With so many fine candidates to choose from, the committee could not fail to find a number eminently qualified for the Panama jobs. After reviewing the information sent in by contractors, checking with Dun & Bradstreet, and consulting the Bureau of Contract Information of the AGC, Thomas and his colleagues rated the applicants. They also drafted a contract and established a tentative fee schedule. Meanwhile, the Fixed Fee Section arranged to transport men, equipment, and materials to the Canal Zone. By the third week in October, all was in readiness. Woodring had only to name the contractors and negotiate the contracts.¹⁰⁷

It was not to be that simple. The procedure adopted by the Secretary sparked accusations that the War Department was favoring big business. The AGC and the building trades unions demanded that all contractors have equal opportunities. On learning that a majority of the applicants were from the East, several congressmen from other sections raised objections. Other congressmen entered pleas on behalf of constituents. Late in October Woodring agreed to circularize the industry. Interested parties had until 8 November to file experience

briefs. Any firm or combination of firms capable of handling a nine-million-dollar project was eligible. Nearly one hundred individual companies and joint ventures applied. Some failed to qualify, their assets being insufficient. The committee quickly graded the rest and, on 17 November, sent a list of seventeen "first choice" contractors to the Secretary. At this point, a powerful sponsor, dean of the House Adolph J. Sabath, urged selection of a contractor who, as Thomas put it, had his office in his hat and who, moreover, had recently drawn a heavy penalty for not completing a job on time. Unable to withstand this pressure and unwilling to give in to it, Woodring in early December ordered Seaman to advertise the Panama projects for fixed-price letting. Under the slow competitive system, bids could not be opened before February.¹⁰⁸ The attempt to expedite construction in Panama by using fixed-fee contracts had ended in failure.

The scapegoat for the Panama fiasco was the Quartermaster Corps. In vain did General Gibbins protest that the delay in letting contracts was owing "to causes beyond the control of this office."¹⁰⁹ From Panama General Stone wired the War Department: "Dry season

¹⁰⁷ (1) Ltr, Pitz to George A. Fuller Co., 28 Sep 39. QM 095 (Fuller, George A.) 1936-41. (2) Memo, Ogden for Schley, 21 Oct 39. (3) Ltr, Pitz to Danielson, 20 Oct 39. Last two in Thomas Papers. (4) Answers to Questionnaire, Thomas to EHD, 31 May 56. (5) Memo, Matheson, Thomas, and Ogden for the Board of Selection, 25 Oct 39. Thomas Papers.

¹⁰⁸ (1) QM 600.1 (Panama) 1920-39. (2) Ltr, Pitz to All Contractors, circa 31 Oct 39. (3) Telg, Gibbins to The Austin Co., Phila., Pa., 31 Oct 39. Last two in Thomas Papers. (4) *The Constructor*, November 1939, p. 16. (5) Ltr, with Incl, Matheson *et al.* to the Board of Selection, 17 Nov 39. Thomas Papers. (6) Thomas Interv, 27 Dec 55. (7) Answers to Questionnaire, Thomas to EHD, 31 May 56. (8) Memo, Gasser for Gibbins, 13 Nov 39. QM 600.1 (Panama) 1930-41. (9) Ltrs, Woodring to Rep Adolph J. Sabath, 14 Nov, 7 Dec 39. SW Files, Constr Work, 251-650. (10) Telg, TAG to Stone, 12 Dec 39. QM 600.1 (Panama) (AC Expansion) I. ¹⁰⁹ 2d Ind, Gibbins to TAG, 7 Dec 39, basic missing. QM 600.1 (Panama) (AC Expansion) I.

has come and weather is fine Am more convinced than ever of necessity of putting all construction work here under the direction of the Department Commander. With the push and initiative he can give, the work will be carried on to early completion."¹¹⁰ General Arnold, still the Quartermaster's most persistent critic, expressed particular dissatisfaction with the handling of the Panama air base. Until this time General Seaman had managed to hold his own. With Tyner's help he had checkmated a move by the Air Corps to take over airfield design; and he had withstood continuing pressure from the AGC for a fixed-fee contract in Alaska. There were some who praised his efforts, among them Brig. Gen. George H. Brett of Arnold's staff.¹¹¹ But Brett's voice and the voices of like-minded men were drowned out by the rising chorus of complaints.

Removing construction from the Quartermaster Corps came up again. In October 1939 two members of the House Appropriations Committee, Representatives Albert J. Engel and Joe Starnes, informed the General Staff that they intended to sponsor legislation giving the function to the Corps of Engineers. The news was not particularly welcome. A premature attempt to bring

about the change might ruin the Engineers' chances for years to come. Although the congressmen seemed in no hurry, General Marshall had to be ready to take a stand should a bill be introduced. Somewhat reluctantly, he reopened the question. The Staff reviewed earlier studies and kept an eye on Quartermaster progress.¹¹² Vetoing a proposal by a former member of the wartime Construction Division to reestablish the separate corps, General Tyner conceded that a change was desirable but maintained that construction should go to the Engineers eventually. "The enormous . . . program now underway is too far developed," he added, "to change horses at this moment."¹¹³ Then, on 18 January 1940, the President called once more for recommendations as to what changes should be made under the Reorganization Act. The next day General Gasser asked Tyner what to do with maintenance if construction went to the Engineers.¹¹⁴ Learning from Matheson what was afoot, General Schley hastened to offer his views. Maintenance, he insisted, should be left where it was. As for transferring construction, he felt the time was inopportune. The change should not take place while the Quartermaster Corps was in the midst of a big emergency program. "Any transfer," Schley wrote, "no matter to what organization, will cause delay. Such a delay might be

¹¹⁰ Telg, Stone to TAG, 4 Dec 39. QM 600.1 (Panama) (AC Expansion) I.

¹¹¹ (1) DS, G-4 to TQMG, 7 Dec 39. G-4/30552-20. (2) Memo, Arnold for Tyner, n.d., sub: Delay in AC Constr Program. QM 600.1 (Air Corps) (Emergency Program) 1940. (3) R&R Sheet, B&G Sec OCAC to Arnold, 22 Aug 39, with handwritten note thereon. AAF Central Files, 600.121 from Jul 39-Aug 40. (4) Ltr, CQM to CO Barksdale Fld, 28 Dec 39, and Inds. QM 600.1 (Barksdale Fld) 1940. (5) G-4/31364. (6) R&R Sheet, Brett to Arnold, 7 Nov 39. AAF Central Files, 600.121 from Jul 39-Aug 40.

¹¹² (1) Memo, OCofS (Maj James D. McIntyre) for Marshall, 26 Oct 39. AG 020 (4-21-39). (2) Memo, Tyner for Strong, 13 Nov 39. G-4/30552-25. (3) Tel Conv, Col Chamberlain, G-4, and Seaman, 29 Dec 39. QM 600.1 (Misc) 1940.

¹¹³ Memo, Tyner for Marshall, 26 Dec 39. G-3/31597.

¹¹⁴ (1) Ltr, BOB to Woodring, 18 Jan 40. (2) Memo, Gasser for Tyner, 19 Jan 40. Both in AGO 020 (4-21-39).



GENERAL MOORE

serious at this time.”¹¹⁵ This argument made a deep impression on the new G-4, Brig. Gen. Richard C. Moore, who had succeeded Tyner on 21 January. When Moore, who was an Engineer officer, suggested that the transfer be postponed for at least a year, Marshall and Woodring decided to wait.¹¹⁶

This decision was followed shortly by the retirement of General Seaman. Recalled from the West Coast late in February, Colonel Hartman became head of the Construction Division on 1 March 1940. The new chief was generally regarded as the logical man for the job. Within the Construction Service he had long enjoyed an outstanding reputation. Capable and conscientious,

he had won the respect of the General Staff. General Spalding had commended him highly. General Tyner, asked later if he had considered Hartman competent, replied laconically, “God, yes.” And although General Moore would have preferred to see the position filled by an Engineer, he agreed that the new man seemed particularly well qualified.¹¹⁷ General Gregory, who succeeded Gibbins on 1 April 1940, raised no objections. Afterward he said, “At the time I was made Quartermaster General, my three assistants had already been chosen, which included General Hartman, but I probably would have appointed him anyway because he had been in the Construction Division during World War I and had made a very good record then.”¹¹⁸ In the months to come, Hartman was to need all of his knowledge and experience, for on his shoulders soon would fall the mantle of Littell.

The Period of the Phony War

In the offing was a far larger and better balanced program than the one begun in 1939. Throughout the months of the “phony war,” military leaders, anticipating a major emergency, pressed for further rearmament. Among their immediate goals were a Regular Army of 280,000, a National Guard of 450,000, critical and essential items of equipment for the Protective Mobilization Force, and a stronger network of defenses. Beyond this they sought to prepare the way for an eventual wartime force of

¹¹⁵ Memo, Schley for Matheson, 2 Feb 40. 600.1 Secret File No. 1 of 2 Secret Files.

¹¹⁶ (1) Memo, Moore for Marshall, 10 Feb 40. (2) Memo, Moore for Marshall, 24 Feb 40. (3) Ltr, Woodring to BOB, 8 Feb 40. All in G-4/31343.

¹¹⁷ (1) Pagan Interv, 8 Mar 57; Tyner Interv, 28 Sep 55. (2) Memo, Moore for Marshall, 30 Mar 40. AG 020 (4-21-39).

¹¹⁸ Verbatim Rpt, Meeting with Gregory and Hastings, p. 8.

4,000,000 men. By peacetime standards the cost of construction alone would be staggering. The sums required for expanding existing arsenals, depots, and proving grounds and for building new manufacturing plants came to more than \$400 million. About \$100 million would go for troop construction at established posts in the United States. The Air Corps' deferred projects would cost another \$100 million. To complete the installations in the overseas possessions would take at least \$55 million more. These sums did not cover the proposed improvement of seacoast defenses. Nor did they include contemplated projects for which no estimates had yet been made. An early beginning was imperative, particularly for the industrial projects.¹¹⁹ In December 1939 the Chief of Ordnance, Maj. Gen. Charles M. Wesson, warned the Assistant Secretary that time was wasting. "To adequately prepare this nation for a major war," he said, "would require, under present conditions, two years from the time money is available."¹²⁰

The Army had neither the funds nor the authority to launch its bold new program. The outbreak of war in Europe had raised hopes of immediate large appropriations and vigorous action, but these hopes were dashed as the President, trimming his sails to the political winds, decided to go slowly. In October 1939

the Bureau of the Budget notified the War Department that requests should be for minimum requirements only. Before long Roosevelt revealed his intention of starting a drive for governmental economy. In November he asked Congress for a modest sum to defray the costs of the limited emergency. The Construction Division would receive a mere \$10,661,600, two-thirds of which was to pay back money borrowed from authorized projects. The War Department's budget for fiscal year 1941, presented to Congress in January 1940, contained but \$30,061,748 for construction, \$18,857,458 for maintenance, and \$866,000 for land. And when the President made drastic cuts in the rivers and harbors estimate, the House retaliated by slashing the estimate for military construction in half. Meanwhile, the Budget Bureau's insistence that future askings be small hampered the Army's effort to draft a new construction authorization bill.¹²¹ As long as the "phony war" continued, a big preparedness effort seemed unlikely.

The Construction Division needed time to get ready. After two decades of mobilization planning the War Department

¹¹⁹ (1) Watson, *Chief of Staff*, pp. 157ff. (2) Memo, Marshall for Woodring, 7 Sep 39. CofS, Misc Confs, 1938-42. (3) WD Ltr AG 320.2 (10-27-39) E-C to WDGS, 30 Oct 39. G-4/31453. (4) Memo, Tyner for Strong, 8 Jan 40. G-4/31349-1. (5) Incl with Ltr, Woodring to A. J. May, Chm H Mil Affs Comm, 13 Jan 40. SW Files, Nat Def 151-400. (6) Memo, Seaman for TAG, 9 Jan 40. QM 600.1 (Funds) VIII.

¹²⁰ Memo, Wesson for Johnson, 2 Dec 39. SW Files-782-850.

¹²¹ (1) Ltr, BOWD to Chiefs of Estimating Agencies, 30 Oct 39. G-4/31190-7. (2) *New York Times*, November 27, 1939, p. 1; December 6, 1939, p. 3; December 27, 1939, p. 1; January 1, 1940, p. 1. (3) H Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings on Emergency Supplemental Appropriation Bill for 1940*, Nov 39, pp. 1ff., 68-80. (4) Brief, OCoS (W.M.R.) 12 Feb 40. QM 652 1922-40. (5) H Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings on Military Establishment Appropriation Bill for 1941*, Feb-Mar 40, pp. 23-26, 388. (6) H Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings on War Department Civil Functions Bill for 1941*, Jan-Feb 40, pp. 101ff. (7) S Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings on Military Establishment Appropriation Bill for 1941*, Apr-May 40, pp. 5-6. (8) G-4/30552 and G-4/30552-27.

still had no effective blueprint for carrying out a large emergency building program. Addressing the annual convention of the AGC at Memphis on 8 February 1940, Assistant Secretary Johnson said, "Let me frankly confess, we are not ready to face an M-day on the construction front We have been so busy on the munitions front of guns, planes, tanks and fighting equipment that we have neglected the construction phases of industrial mobilization which are equally important toward the ultimate success of battle."¹²² The plans for command construction were in far worse shape than those for industrial projects. The latest Protective Mobilization Plan echoed earlier versions in calling for little building. Johnson tried belatedly to remedy the situation. In February 1940 he organized a Construction Section in ANMB and instructed it to study not only industrial

but command requirements as well. Other responsible officials continued to neglect the problem. Aside from forcing the Quartermaster Corps to make exhaustive studies of prefabs, General Tyner did little to advance construction preparations. General Seaman did even less. In October 1939 he abolished the Planning Branch and henceforth made no apparent effort to ready the division for a full-scale emergency.¹²³ When Hartman returned in early 1940, time was fast running out.

With the coming of spring, the "phony war" in Europe ended. As the Germans launched their swift offensives and won their crushing victories, the United States began to mobilize.

¹²³ (1) WD, MR 4-1, 5 Jan 40, sub: Supply, Constr, Transport, Sec V. (2) Memo, Secy ANMB for Gibbins, 8 Feb 40. ANMB Files—334 Comm Members and Min of Mtgs (Constr Sec). (3) G-4/31409-1. (4) QM 600.1 (Prefab Bldgs). (5) OQMG Office Order 34, 16 Oct 39. QM 020 (Constr) 1921-39.

¹²² *The Constructor*, February 1940, p. 20.